

Vol. IX. No. 1



JULY, 1906

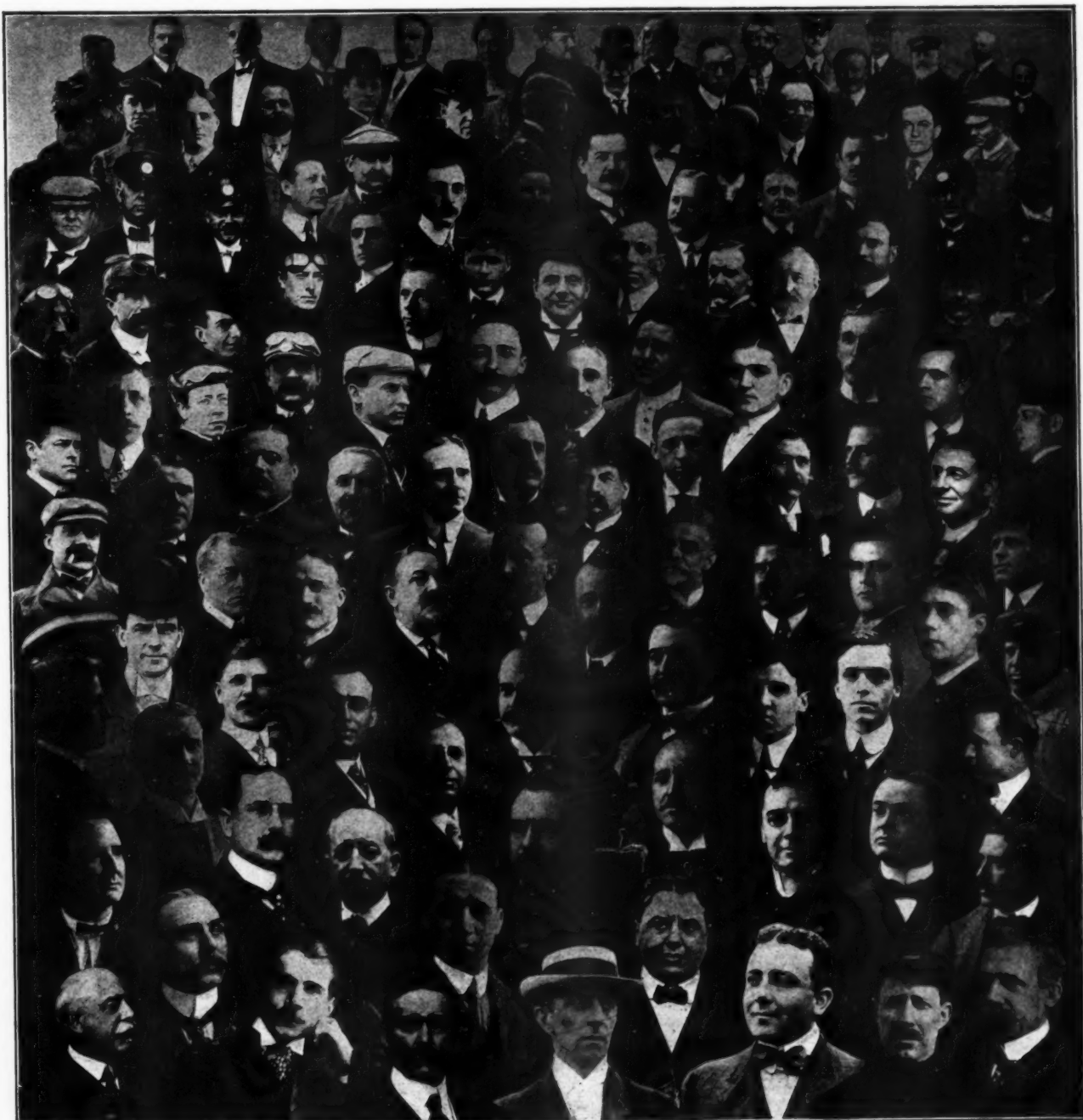
*Index No.*

*7982*

# THE AUTOMOBILE MAGAZINE

Published by THE AUTOMOBILE PRESS  
ANGUS SINCLAIR, Editor  
136 Liberty Street, New York

MONTHLY  
Price, 20 Cents



PEOPLE PROMINENT IN THE AUTOMOBILE WORLD

Equipment at the Shows indicates a tire's popularity  
Service on the Road shows a tire's quality . . . . .

# Diamond

## WRAPPED TREAD TIRES

Were the equipment on more exhibition cars at the Empire City  
Track Open Air Show than any other make

DIAMOND WRAPPED TREAD TIRES were the equipment on the 35-40 H. P. Knox Car in its world's record non-stop run from Springfield, Mass., to New York and return on Memorial Day. Time, 19 hours, 53 minutes. Car, passengers and baggage weighed 4485 pounds. Tires were not touched on the entire trip.

**READ THIS TELEGRAM:**

DIAMOND RUBBER Co.:—Diamond Tires went through the Boston-New York and return non-stop run without any trouble of any kind, carrying seven passengers and three hundred pounds of baggage.  
May 31. KNOX AUTO. CO.

### THE TIRE FOR WEAR

Let us send you our new Catalogue and Instruction Book

**The Diamond Rubber Co., AKRON, OHIO....**

**LIST OF BRANCHES**

NEW YORK, 78 Reade Street  
NEW YORK, 1717 Broadway  
BOSTON, 174 Columbus Avenue  
PHILADELPHIA, 304, 306 N. Broad Street

BUFFALO, 715 Main Street  
DETROIT, 238 Jefferson Avenue  
CLEVELAND, 1514 Euclid Avenue  
CHICAGO, 1533-31 Michigan Avenue

ST. LOUIS, 3906 Olive Street  
MINNEAPOLIS, 508 Second Avenue, South  
DENVER, 1735 Arapahoe Street  
SAN FRANCISCO

**"Rigs**  
**That**  
**Run"**

### TWO MODELS FOR 1906

**Model A-4 cyl. \$2200**

**Model B-4 cyl. 2500**

**ST. LOUIS**  
**MOTOR CAR CO.**

**PEORIA,**

**ILL.**







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## Good Roads

In spite of the drastic laws enacted by many of the State Legislatures affecting the running of automobiles on public

future. It becomes all men therefore to act towards it with a sensible view of the inevitable prospect. It is not a thing to be suppressed in a short time and

future and more grateful generations. Apart from the comfort, convenience and elegance of travel already afforded by the use of the automobile, the new



IN THE MARITIME ALPS—TYPIFYING WHAT A TOURING AUTOMOBILIST ENCOUNTERS—ROAD A SUCCESSION OF DEVIL'S ELBOWS

highways the opening of the summer shows a largely increased use of the machine and no one doubts now but that the automobile is the vehicle of the

future, but is gradually taking definite shape, and every hand engaged in every variety of experiment in its construction is the hand of a benefactor to

vehicle is the forerunner of a great road-making reform. The advent of the steam locomotive early last century left the public roads in a condition border-

ing on utter neglect, but the introduction of the new machine has given a new impetus to road construction, and we can bear with malicious and idiotic legislation on the one hand for a few years, while on the other hand we see highways beginning to assume the solidity of construction calculated to make travel upon them a comfort to everybody instead of a menace to life and limb as they have been during the vanished centuries.

### Defence of Single Cylinder Automobiles

One of our editors owns a single cylinder Cadillac car which he finds entirely satisfactory for the ordinary New Jersey roads, but the State contains not a few steep hills which make slow climbing for the single cylinder motor. A very small increase of power was desirable and the owner thought that a two-cylinder machine would be entirely satisfactory, so he wrote to the Cadillac people urging that they put a two-cylinder machine upon the market. In replying they discussed the subject so broadly that we are moved to reproduce their interesting letter, which reads:

We have your letter of May 3 for which please accept our thanks. All you say in your letter is true. The broad fact still remains that the Cadillac single cylinder car is in greater demand this year than ever before. Had it been possible for us to have turned out 5,000 of these cars this year every one of them would have been delivered. As it is, we have already delivered more than 2,500 and we are several hundred cars behind our orders at this writing. The product of nearly forty cars per day will not take care of the demand.

In markets where last year the same complaints against single cylinders were made, as you have heard in your territory, we are this year selling two single cylinders to one of all other makes retailing at less than \$1,500. Buffalo went mad over two-cylinder cars last year and we succeeded in delivering less than forty single cylinders in that territory. This year we have already shipped one hundred. Why is it? The same may be said of a dozen or fifteen other cities, some of them very large ones.

We realize that a great many Cadillac owners and drivers would be willing to accept our experiment and pay the price for it if we would offer it, providing we could show them that it had a little more horse power, even though we were obliged to ask them \$300 more for a car that would go 300 feet further up a hill on high gear than the present single cylinder. It will be some little time, Mr. Sinclair, before a really successful small, low-priced car of high power can be built. The trouble is that most buyers of this class of goods desire all of the

expensive construction that is to be found in cars selling from \$2,500 up. They are not willing to take a two-speed small car of limited capacity such as the Model M and pay what appears to them to be an excessive extra price over the cost of the Model M. They do not realize that the Model M Car is \$300 too cheap as compared with other automobiles. They do not realize that the Model M car is sold at a price absolutely out of all question on a small product. The writer will venture to say that the material in a Model M car actually costs more than the material in any car selling under \$1,600. The workmanship and labor would be more than any car selling under \$1,600 if made in small quantities, but made in large quantities, as we are making them, we, of course, get the cost of labor down to the minimum.

### The Motor Skate

The annexed engraving shows a development of the roller skate, which is



so much in evidence on our asphalt streets. In this invention the roller skates are each fitted with a motor of  $1\frac{1}{2}$  H. P., air-cooled. In a girdle round the waist of the skater there is a gasoline tank which holds about a quart, and is calculated to be good for about 50 miles of travel. We publish it as a curiosity, but we hope that gasoline skates will come very slowly into use, for the common muscle-driven skate is great enough nuisance in our residential districts.

### Automobile Enemies Attempt Murder

Farmers in the vicinity of Buffalo have found a new sport—that of gunning for automobile enthusiasts. Radiating from Buffalo in many directions are a number of fine roads that have many natural attractions for those who own cars.

Some scorching has taken place there, although there have been no accidents. Frequently it has been reported by people returning from pleasure runs that they have met farmers who have made threatening gestures, as though to draw guns from their pockets, but until the other evening there was no actual attempts at violence.

Paul Geyer, a tester for the E. R. Thomas Motor Company, was returning to the city along a macadam road near Williamsville a few evenings ago, when he heard a shot behind him, and an instant later heard the thud of a bullet against the frame of his car. A second later another one whirled over his head. Geyer, turning his car, sped back up the road in search of the man who had fired the shots at him, but the latter climbed a fence and made a run for it across a field.

### Improvement in Gearing

Pittsburg motorists are expressing themselves delightedly over a new transmission gear which has been approved by the three Frayer-Miller Vanderbilt cup competitors' cars which are now nearly completed at the Oscar Lear automobile factory, in Columbus, Ohio.

Instead of a bewildering assortment of gears, such as adorn most automobiles, the Belden transmission furnishes a simplified apparatus, consisting of two gears on the axle, both controlled by one movement of the lever at the side of the operator. It is a positive gear drive, which delivers 98 per cent. of the power of the motor to the rear wheels, this result being obtained by a rolling contact between the two gears which form the principal part of the transmission. By other modes of transmission at least 35 per cent. of the power is lost before it reaches the wheels. The Belden gear is noiseless and operates without friction, thus insuring a perfectly smooth running gear. The device is the product of the labors of Mr. Belden and Julian Kennedy, the well-known mechanical engineer.

Charles Splitdorf, the coil manufacturer, is as pleased as a boy with a new toy lately and his pleasure arises through the acquisition of a three-story and basement store on Broadway, near Fifty-fourth street. This store runs only twelve feet, perhaps less in depth, but it has a front, and Mr. Splitdorf is fitting up that front in such a manner that people will know the place. The salesroom has been handsomely fitted and the rooms above are pretty. Although not giving it away, Mr. Splitdorf is said to have landed a bargain as Broadway rents go, and with a long lease. Offers for desk room in the place have amounted already to more than the rent, but have not been accepted.

## Motoring in the Chateau District of France

By Charles D. Cooke

The delights of motoring in France have been so frequently and so delight-



CHAS. D. COOKE

fully set forth by many writers of late, and the number of readers who have wished they know just how to go about it to take the same trip has grown so rapidly that I have concluded a sort of "ways and means

article" with a brief description of our trip which would not be unacceptable.

In making up a party I would recommend one of six persons. This will necessitate two cars and allow three persons besides the driver for each car. Most of the big touring cars will hold four and the driver. That is all right for

off the beaten track, among a strange people, to know that you have friends near with another car who can come to your help if need be. Or if they cannot help you, can go for help and repairs.

In choosing your car for the tour, if you have not one already, buy a foreign car and arrange to have it meet you at Cherbourg or Genoa, as the case may be. A foreign car, because supplies and parts are more easily obtainable. Get a good car with ample power, about 30 H. P. is best. A higher power is pleasant but unnecessary and expensive on account of the high price of gasoline, or essence, as it is called on the continent.

### Obstruction of Red Tape to Starting

There is considerable "red tape" to be gone through with before one can tour in France. First, you must have a certificate and number for your car. To

citizen, living in New York, etc., and your business is, so and so.

3. Enclose two carte de Visete photos of yourself. (Much time will be saved by taking these with you.)

This certificate must be stamped by the Commissaire of Police, whose office is on a little side street near the Palais Royal. I called at his office at 9 A. M. and was told to come back at 10. At 10 I called again and left my application. It would have been the work of two minutes to have had the stamp put on, but that would have been inconsistent with the dignity of the office of M. le Commissaire. I was told to come back at 4 which I did and received my paper. After sending in your application it takes anywhere from three days to three weeks to get your certificates. Usually you get your notice to appear for your driving test in two days; but your car certificate, without which you have no number for your car, will not be returned to you inside of a week.

The driver's examination is not severe and consists in driving around two or three blocks in the midst of traffic



FIG. 1. VIEW FROM REGINA HOTEL, Tuilerie Gardens, Eiffel Tower in the distance



FIG. 2. HOTEL AT ORLEANS

short trips, but for a tour, have plenty of room. It becomes very tiresome when one is wedged in and cannot move on an all-day ride. Besides every person must have a certain amount of baggage and it is much easier to carry plenty for three passengers than just or hardly enough for four. And the pleasure of the journey is greatly enhanced by always having all we need at night with which to freshen and clean up.

But why two cars? Because you have a jollier party, especially at night, when you stop at some little inn where everything is not just as nice as you would have liked it. But meeting your friends of the other car, you all get together at dinner and in the relating of your varied experiences, the pleasures and puncture of the day, you forget everything in the fun of it all. Again it is such a feeling of comfort when away

obtain this go to one of the little tobacco shops and buy for 60 centimes a government sheet of paper; address this to M. le Prefect de Police, indicating, first, the full name and Paris address of the owner.

Second, the name and address of the manufacturer.

Third, the type of car and shop number. Enclose a certificate from manufacturer of horse power, gear ratio and speed per hour.

To obtain a driver's license, and no one is allowed to drive without one under severe penalty.

Address another application to the M. le Prefect de Police also on a government paper, stating, first, your Paris residence (if in a hotel get the manager to certify to the fact that you are stopping there).

2. State that you are an American

with the engineer at your side to see how you manage it. If you do not run anybody down you receive your limited certificate the following day by mail. This certificate is good for sixty days, and to make it good for all time you must take it over to police headquarters and have it changed for the all-time one. After receiving your car certificate you get your number painted at the most convenient paint shop, attach it to your car, front and back and you are ready for your tour. I was fortunate enough to have a friend who was friendly to the "powers that be," and I was only held up four days for my car number; but they were anxious days, as I was told by Frenchmen who had been through the ordeal that I would be lucky if I got it in ten days or two weeks. I had a card from the Automobile Club of America to the Auto Club of France, but as



that did not seem to be good further than the office boy and the outside railing, I would not recommend anybody counting too much on help from that source.

Although we had sailed from New York on February 21 on the "Kron Prinz Wilhelm," it was Sunday noon, March 19, when we rolled away from the Hotel Regina, up the Rue de Rivoli through historic Place de la Concorde and up the beautiful Ave de Champs Elysees. At Poste Maillot we obtained our cuficali of so many liters of essence taken out, to be used weeks after on our return into Paris from the other side. Gasolene is heavily taxed in Paris and it is customary to buy what is needed outside the Octroi gates. If you bring back more than you take out you are charged for the difference. Stopping at Sevesnes to fill up with oil and gasolene we decided, as it was so near noon, to lunch at the restaurant made famous in "The Lightning Conductor" as the

examination which awaited us on our arrival at New York. Vain dream! Will it ever be?

Swinging off to the left just before we reached the Palace we pass under the railroad and then follow the old aqueduct.

Mr. Cooke was accompanied by his wife and son with a native chauffeur to care for the car. After leaving Versailles a detailed diary proceeds.

Instead of going direct to Tours via Chartres, we planned to go to Orleans for the night via Dourdan. From Versailles to Dourdan the road is quite accidenté, i. e., sharp turns and steep hills. They seemed to slope our way and we made good time without hurrying. As it was four years since we had made our last motor trip in France, we enjoyed the scenery and novelty. The last thirty miles into Orleans is over a very flat open country. Had race with two other cars of higher power and open bodies

former magnificence and extravagance, is now inhabited only by a caretaker.

From Chambord we followed the left bank of the Loire to Blois, where we cross to visit chateau built by Francis I and Louis XII. A fine example of the architecture of the two periods. It was nearly dark when we left for Tours, 38 miles away. Fine road along dike of river, follows curves of bank. As we entered Tours we stopped to light our lamps and two minutes later swung into the city proper over a fine, new bridge. At the Hotel de Univers we found the motorist's ideal of an inn. Everything so nice, so comfortable and so good.

Stayed here until the 24th of March.

Twenty-first, visited chateau at Loches, 20 miles. Lunch at Hotel de France.

Entrance to chateau unique; nothing much but a ruins now.

Looking from top of Don Jon (prison). Very high. Fine view down the Loire.

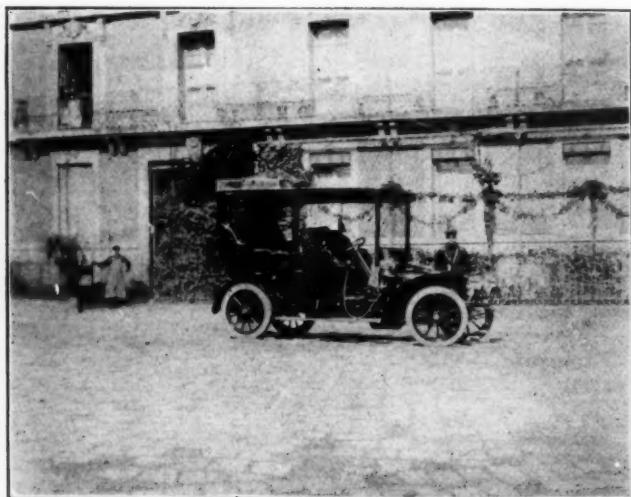


FIG. 3. READY FOR THE ROAD

retreat from Nolly when the crank shaft of her machine broke and her chauffeur deserted her.

As even lunches must be served in courses in France it was close to three before we finally pulled away from Paris up the long hill toward Versailles. As it was a fine spring day and Sunday, the road was alive with motors all going at top speed, but our little 15-20 motor, though handicapped by a heavy demilimousine body and baggage galore, ran beautifully and passed everything but the big forties. In half an hour we slowed up for the Octroi at Versailles. Mr. Official stuck his nose over the door of the car and on our declaration that we "had nothing," received his nod and on we went into third speed. We might have had hundreds of dollars' worth of dutiable goods, but we looked honest and he took our word for it. What a delight our home coming would be if we knew that that would be the sort of an

and beat them both out by one-quarter mile.

Visited cathedral noted for the beauty of its doors.

From Orleans we followed the right bank of the Loire, fine road. At Beaugency, 28 kil., we crossed the river and almost immediately entered the grounds of Chateau Chambord.

This famous chateau was begun in 1526 by Francis I and the work of building was carried on for many years by his successors. It contains 440 chambers and became one of the most celebrated royal palaces in France. It was also the scene of many of the most scandalous excesses known to history.

Lunched at the inn; enjoyed the native wine.

Walked up the wonderful staircases which wind up like a double screw. A person on each pass and repass without seeing one another.

This chateau, a massive pile, relic of

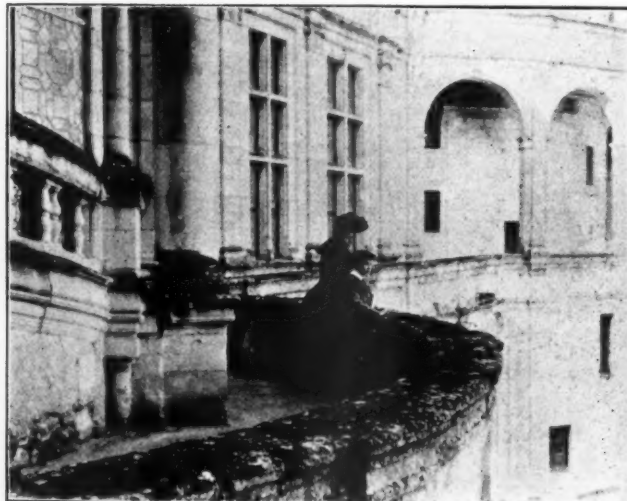


FIG. 4. BALCONY IN COURT YARD OF CHAMBORD CHATEAU

Same day went to fine chateau of Chenonceau.

Chateau Chenonceau is built in middle of a river.

Entrance to Chateau over drawbridge.

Chateau is owned by an American who lives in it. Beautifully and appropriately furnished and very homelike. From here it is 10 miles to Amboise, a fine old chateau. This is where Molly took ride up to top of tower in car. The keeper denies the story. It is possible to do it, however. From here to Tours it is 15 miles, where we arrived by dark. Without a motor it would take a day for each of these Chateaux.

On 23d we went to chateau at Azay le Rideau, 15 miles. Another fine building with beautiful grounds. It is inhabited and homelike.

To Chinon 12 miles.

Approaching chateau at Chinon.

Trimmed trees make it a beautiful road in summer.



Chateau at Chinon stands on hill above town, as seen from hotel in market square is shown in Fig. 16.

The path up is very narrow, steep and dirty, a kind of alleyway. Of course there is a road up, but that is a long way around.

On the way up we meet some old natives. They live in the houses or caves you see to the right. The front is built up, the rest is only a cave.

From Chinon it is 18 miles to Longueois, a fine, old chateau, with family living in it and kept up in good style. The banqueting hall and chapel are chief points of interest. It is provided with drawbridge and moat, which you can see in the photo, Fig. 19. The stone projections around the top are ports looking down from a gallery which completely encircles chateau. The holes or ports were useful at one time to drop stones, etc., through upon an attacking force.

Instead of following our friend Brown,

tion was given recently at the garage of the Commercial Auto Storage Co., at Forty-third street and Eleventh avenue, New York. The system is the first of its kind established in the city, and the exhibition was witnessed by the heads of the city departments having jurisdiction over the methods of storing and handling gasoline and other volatile oils. A representative of THE AUTOMOBILE MAGAZINE was also present and had an excellent opportunity of witnessing the apparatus in operation. It may be briefly described as a storage tank located underneath or outside the building at any desired depth, or the storage tank may be located in a river, if more convenient, and the gasoline may be delivered at any distance or height away from the storage tank, with perfect safety.

Inside the garage, at a convenient height, there is a smaller tank connected with a system of piping to the larger tank. The smaller tank is of  $\frac{3}{8}$ -inch cast steel, and holds 5 gallons. The sys-

and handling gasoline seems to leave nothing further to be desired.

### The Social Electric Automobile

The electrically-driven automobile as a carriage for a business man in his work around the city or as a carriage ideal in every way for the use of a lady somehow strikes one as just right. The ladies have for a long time recognized the value of the electric car; to tell the honest truth, there is nothing which is as fitting in every way as a pretty lady, or, what is better, two pretty ladies, seated in a neat electric carriage driving through the city or over the country roads. There is little chance of smudging a clean dress in such a car, and as a rule every lady seen operating an electric is dressed prettily and looks pleased with the world and her conveyance, too. "That's pretty" has been said many times by people on the street when an electric passed, driven by a pretty woman with



FIG. 5. CHAMBORD CHATEAU

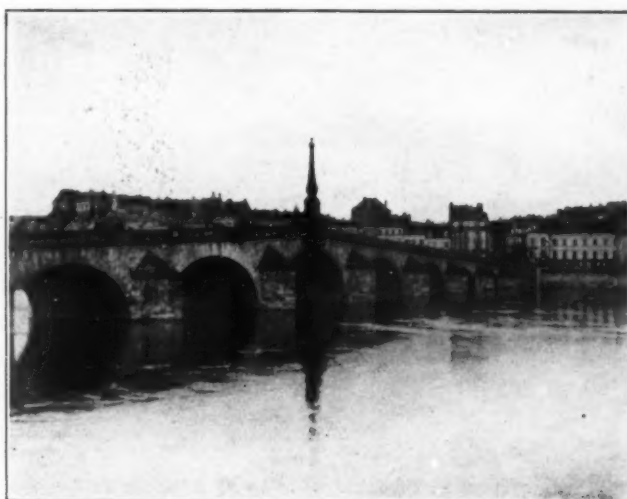


FIG. 6. BRIDGE OVER THE LOIRE

the Lightning Conductor, from Tours, we set our face eastward, having the flowers and sunshine of the Riviera in mind as more congenial than the frequent showers and raw winds of Northern France. We made the run from Tours to Bourges in the pouring rain with only intervals of sunshine. The roads were good, as they always are in France, but a bit slippery. Distance, 94 miles.

The house of Jacques de Coeur is one of the principal attractions of Bourges, and is now the Hotel de Villi, or City Hall. Jacques de Coeur was one of the human phenomenons of the 15th century, having amassed an immense fortune, a proceeding that in those days was strictly forbidden to any people except princes and powerful nobles.

### Oil Storage and Distribution

An interesting demonstration of the Snell system of oil storage and distribu-

tem of piping is so arranged that as the gasoline is drawn from the smaller tank an equal quantity of water finds its way to the larger tank, the gasoline being lighter than water naturally rises to the smaller tank and not only is there no loss by evaporation but the gasoline is entirely freed from any impurities. The action of the liquids in the tanks is automatic. No work is required further than turning a lever a quarter of a turn on drawing gasoline, and any excess of liquid that may be drawn can readily be returned to the storage tank either by means of a self-acting rubber suction pipe, or by allowing the surplus to drain back into the storage tank.

The apparatus can readily be adapted to any locality. Adjustable gauges show the amount of gasoline in the tank and attachments. Those present were loud in praise of the apparatus, and in point of convenience and absolute safety the Snell hydraulic suction system of storing

another one by her side conversing animatedly. "No thought of dirt there," said C. Arthur Benjamin, of the Bobcock Company. As a matter of record, there is a growing interest in electric cars, the sales on which are increasing regularly. With the establishment of charging stations wherever a garage may be found, long trips are made possible, and, according to Mr. Benjamin, the country roads will see more and more of the electric carriage from this time on. The ease of operation and the elimination of cranking brings the car prominently to the front, while the entire absence of dirt, grease and the like recommends it to those who object to traveling in the unsightly motor get ups of to-day.

Somebody reaps the benefit of every advertisement. If it is not the man who pays for the space, it is his own fault.—Agricultural Advertising.

## European Notes and Comment

By A. F. Sinclair

### The English Motor Union

This body is already the most powerful combination of motorists in the world, and is still growing. It was originated by the Automobile Club of Great Britain and Ireland for the purpose of undertaking the various duties in connection with combinations of motorists for self-defense, providing legal advice and assistance in cases involving points of law connected with automobilism, organizing the motorist vote for the purpose of securing greater freedom, and so on. The Union is managed by a general committee consisting of members of the sixty-four clubs of which it is composed, and these representatives are appointed by the clubs on a pro rata basis. At the annual meeting held in London on the 28th of March it was

was read before the Automobile Club of Great Britain and Ireland towards the end of March by Dugald Clerk, the eminent authority on gas engines. The trend of the paper was more in the direction of discountenancing the rating on a basis of cylinder dimensions than in propounding a satisfactory method of deciding the horse power of such engines, and although a great deal of interesting information on the subject of experiments was conveyed to the audience it cannot be said that we are any nearer an accurate method of assessment. So many factors besides mere cylinder volume, such as compression, revolutions of the crank temperature, etc., come into the question, that so far as our knowledge goes at present there does not appear to be any rigid method

other day that a man charged with exceeding the speed limit of 20 miles an hour was able to prove to the rural bench of justices that he could not have exceeded 10 miles an hour throughout his journey. Then they fined him for "loitering."

### The Amateur Professional

One of the greatest pests of the British motor trade is the amateur professional, the man who poses as an amateur driver on the strength of being the agent for the car he drives instead of being the paid driver of it. The airs that some of these fellows assume are sufficient to disgust a man of ordinary modesty, and they succeed in keeping themselves and their wares before the public by means of letters to the technical press in a way suggesting barefaced robbery. It is no exaggeration to say that some of these men obtain a thousand pounds' worth of advertising for

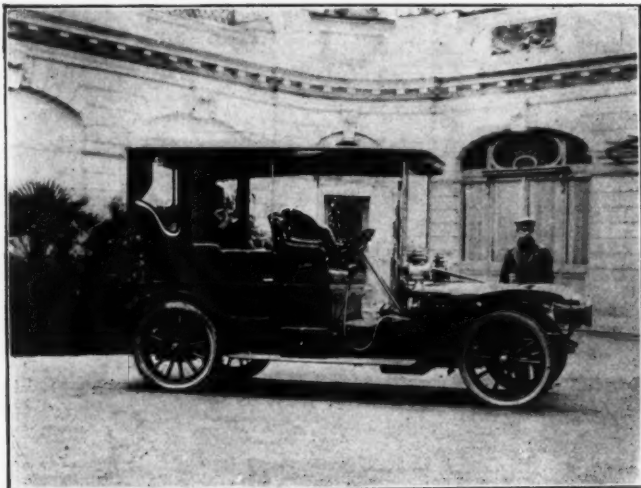


FIG. 7. COURT YARD OF HOTEL UNIVERS, TOURS



FIG. 8. ENTRANCE TO CHATEAU AT LOCHES

stated that the membership had reached a total of 11,265, the addition for the year ending December 31, 1905, having been 4,010, surely a healthy rate of increase. Being on a semi-democratic basis the Motor Union is more acceptable to motorists in general than the club could ever hope to be, but like many such cumbrous combinations its administration is left to a limited number of people who tend to become afflicted with the discomfort resulting from that contraction. Still, if confined within its own sphere of usefulness the Union is certain to get through a vast amount of useful work, even if it does nothing more than organize the motoring vote. An agreement is on the point of being completed as between the Club and the Union on the one hand and the provincial affiliated clubs as well as the associated national clubs of Scotland and Ireland on the other.

### Rating Petrol Engine Power

An interesting paper on this subject

or formula for petrol engine power rating. As a working method Mr. Clerk stated that a petrol motor of first class construction might be expected to develop one brake horse power for every 70 lbs. pressure per square inch exercised upon the piston, and on the assumption that engines up to 12 H. P. had a speed of 800 feet per minute, and those over 12 H. P. a speed of 1,000 feet per minute, he was of opinion that a fairly satisfactory rule could be based on these figures. This would take the form  $\frac{D^2 \times N}{C}$  in which D is the diameter, N the number of cylinders and C a constant varying for engines not exceeding and exceeding 12 H. P.

### Loitering!

In England where the vagaries of magisterial decisions on motorists' cases are frequently extremely vexatious, there sometimes enters an element of humor which modifies the exasperation. It was stated in the House of Commons the

every hundred pounds they spend on the publicity pages of the technical press. Sneaking into the correspondence columns on every trifling pretext, they succeed on every occasion in dragging in some reference to the particular car or cars which they sell. They are mostly ex-racing cyclists, men who have learned all the sordid tricks relating to that none too refined form of sport, with all the petty meannesses also, and those they exploit to their own advantage at the cost of the papers which give them free advertising on the off chance of getting an odd page occasionally paid for. There are about half a dozen of this tribe, all of them as vain as boarding-school girls, and the slightest reference in the technical papers in any terms other than those of effusive praise results in threats to withdraw advertising or worse. Any paper having the courage to write plainly about these barnacles would earn the gratitude of all honorable men connected

with the industry in Britain, but, curiously enough, none of the papers is independent enough to do it.

#### Foreign Tourists in Britain

The following information will be

The trouble about the plates then begins. These must be placed front and back, and they must be of prescribed size and colors. The best plan for anyone coming is to arrange through his

posit of a thousand francs (\$200) lodged to guarantee the bona fides of the affair, and as security for the efficient organizing of the contest. A number of restrictions with regard to the official ap-



FIG. 9. PROSPECT FROM LOWER CHATEAU AT LOCHES



FIG. 10. THE APPROACH TO CHENONCEAU

found of interest by any one in America who may desire to tour in Britain. Needless to say there is no import duty to pay on the car. The principal trouble will be found in connection with registration of the car and securing the mark and number plates, the last being the most irksome, as they are not always obtainable at ports of landing. The car must be registered with the local au-

club and the corresponding organization in this country to have the necessary registration effected and plates prepared prior to landing.

#### Unofficial Trials

France has up till now been the happy hunting ground of the irresponsible competition promoter. Every pettifogging sheet which purported to cater for the motoring news reader seemed to

pointment of judges; the adjudication of protests; private trials, in which no car will be allowed to be officially tested except in competition with other makes; restrictions on premature advertising, and various other matters, all being so arranged that violation carries with it some penalty. This arrangement came not a day too soon, for to readers of the French technical press the multiplicity

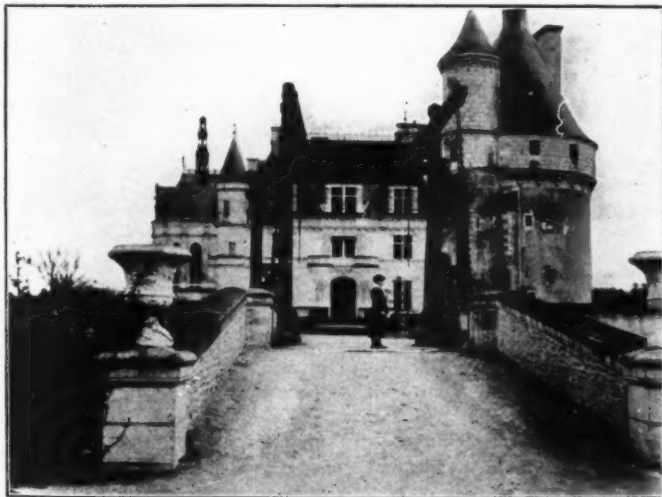


FIG. 11. DRAWBRIDGE AND MOAT AT CHENONCEAU CHATEAU



FIG. 12. AZAY LE RIDEAU CHATEAU

thority, usually through the police department at the place of landing, and the driver must be licensed. There is no examination. All the driver has to do is to apply to the town clerk and pay a fee of five shillings (\$1.25), whereupon a license to drive is issued. The cost of registering the car is twenty shillings (\$5), and on payment of that amount a register mark and number is provided.

consider it a point of honor to organize one or more of these trials in the course of each season, and there were not a few very curious abuses in connection with some of them. A glaring case in the promotion of a voiturette competition last year compelled the A. C. F. to take action and now regulations have been issued under which all such trials must be licensed, and a de-

of these tests has proved in the past a source of considerable annoyance. They took up valuable space which might have been more usefully employed. But a fine of £40 does not seem much of a penalty for violation of the regulations.

#### British Restrictions

In Britain also some restraint is to be imposed on private trials, a highly laudable proceeding. A practice has grown



up of running single cars over long or short distances up to several thousands of miles, and as the greatest publicity can usually be obtained by carrying a daily newspaper man as observer, the services of one of these individuals, many of them unable to distinguish the governor from the carburetter, are generally procured. There then appear daily accounts of the car's running; needlessly to say, breakdowns are unknown, and the whole thing ends with a flourish of trumpets and much effective advertising. This kind of thing the A. C. G. B. I. have decided to suppress, and have provided as a substitute trials of the same kind, but which must be conducted under the observation of a capable man or men, appointed by the club. This system of observation has been open to makers for a considerable time, but the expense in connection with it has deterred many who were anxious for genuine tests from availing themselves of

the latter. Enquiry and examination brought to light the fact that the ideas embodied in the invention were not altogether new, and although it constitutes an advance on the old pawl or ratchet-clutch drive, in that a rearward movement is provided for, it is in no way superior to that older device in its tendency to drive with the wrong wheel. It is the case that in going round a turn the inside wheel may not only be stationary for a moment while the outside wheel goes round the wider curve, but under certain circumstances the inside wheel may move a little backward. It is evident, therefore, that when the whole drawing effect is confined to the inside wheel—the while the outside one runs free—on occasion the car may stop for want of propulsion. The axle was to have undergone a week's trial under the supervision of A. C. G. B. I. observers, but on the publication of a letter by a patent agent named Phillips, that he had

climbing speed trial of about  $4\frac{1}{2}$  miles up a steep mountain road, and a speed test of about 4 miles on the level. (3) A three-days trial of reliability over a route about 560 miles in length, passing through Frankfort, Munich, Klagenfurt, Vienna and Salsburg. The list of entries numbers a hundred and forty-seven, the majority of which are, of course, German, but Britain does fairly well with thirteen, France has four only—surely a poor appearance for the leading motor manufacturing country—Italy has two, Belgium two, and the United States one only, P. P. Pierce, of Buffalo. The most notable name in the list is your one-time highly honored guest, Heinrich Prinz von Preussen Kgl. Hobeit, which, being translated into white men's language, means His Royal Highness Prince Henry of Prussia—and a good motorist, notwithstanding. The most interesting of the British entrants is Mrs. Maud Manville, who drove her British-



FIG. 13. AZAY LE RIDEAUX CHATEAU

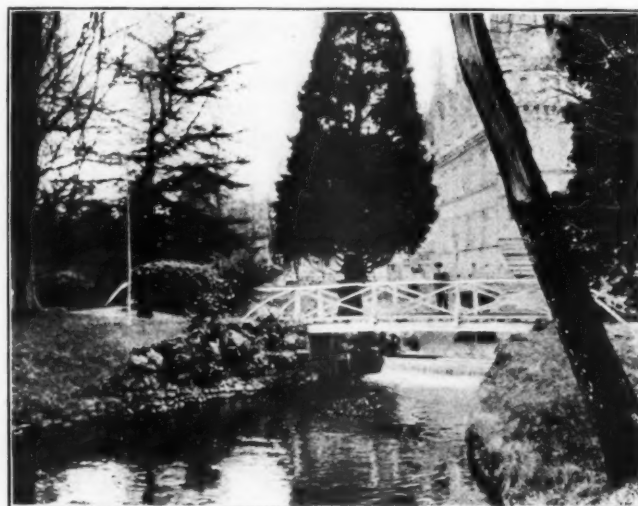


FIG. 14. CHATEAU AZAY LE RIDEAUX

the facilities provided. In view of the fact that the system has been made compulsory, the club are engaged in an investigation of the expense involved, with a view to the establishment of a universal rate.

#### The Hedgeland Axle

This device is no doubt well known by many readers of the magazine, and it may interest them to learn that it has caused a good deal of a commotion in Britain, a commotion, however, which has subsided in a rather abrupt manner. The inventor, Mr. Hedgeland, brought it over fitted to the first 4-cylinder Cadillac car to enter Great Britain. The cause of the furore was the claim advanced by the inventor that the device would abolish the differential or balance gear.

Now, no one likes the differential. It is, of course, the most useful appliance to effect the object yet tried, but it has some glaring defects and the prospect of getting rid of it by means of the Hedgeland axle drew much attention to

invented such an axle many years ago, particulars and the patent number of which were given, the test was suspended, and nothing has been heard of the device for about three weeks.

#### The Herkomer Trophy Race

This contest was instituted by one of the most versatile geniuses of modern times. Hubert Herkomer was born in Bavaria in 1849, and after wandering in various countries in the world, including the United States, settled in London in 1870, becoming art professor at Oxford in 1889. He has been in turn engraver, woodcarver, art ironsmith, architect, composer, playwright, actor, and all the time painter. Some years ago he took up motoring with his whole hearted enthusiasm and having retired from active work to his native Bavaria, he presented the trophy for competition among genuine touring cars not necessarily driven by their owners.

The competition is in three sections: (1) An appearance test. (2) A hill-

built Daimler in the same contest last year with very pronounced success. The competition is to be held from the 6th till the 13th of June.

#### Motor Cycle Development

A form of motoring which is increasing with great rapidity in Europe is that enjoyed by the comparatively poor, the man who cannot afford a car, but whose purse will run to a motor bicycle. In England especially these machines are exceedingly numerous, due partly to the large middle-class population, and to the fine roads. In Scotland they are also fairly numerous, but development is retarded by the structure of Scottish houses, which, in many towns, are built in flats or tenements, three and four stories high, and as there is no means of reaching the higher floors except by climbing the common stairway, a motor bicycle of 150 pounds weight becomes an unpleasant incumbrance. In Scotland the well-to-do, as distinct from the wealthy class, is not so numerous



proportionately as in England. Ireland lags behind both the other two countries, the much lower wealth and the inferior roads being the principal contributing causes. Several European countries have national clubs, such as the Motocycle Club de France, others in

and the journey will be divided into six stages extending over a week.

### Tours Better Than Races

When conducted under adequate rules, long distance tours are better than races

abroad, also, this year, even before the Glidden contest, as one of the best American cars made is competing in both the big tours of Europe. It is unfortunate that there should be only one such, because the percentage of chance is unfair. The odds against him are too



FIG. 15. FRENCH ROAD WELL SHADED IN SUMMER, TREES TRIMMED TO MAKE THEM SPREAD



FIG. 16. CHINON

Austria, Denmark and Germany, and the Auto-cycle Club (without national designation), which is an offshoot of the A. C. G. B. I. This club is a society of encouragement so far as motor cycling in England is concerned, and in pursuit of its object will conduct a test of two and three wheeled machines next month

for yielding practical information to buyers concerning the merits of cars for general road service, and the year is rich with promise in this respect. The two big tours abroad and the Glidden contest here will have a value and an interest for the general public greater even than the Grand Prix in France and the

great to hope for a victory by the single American entry in the Herkomer tour of the European Circuit. Should he meet with mishap and fail, it would be the failure of 100 per cent. of the American cars entered; whereas, were there several cars of the same sort competing, as there are of the foreign makes, one



FIG. 17. STEEP AND NARROW STREET LEADING TO CHATEAU AT CHINON



FIG. 18. A REPRESENTATIVE COUPLE OF FRENCH PEASANTS

which will extend from Land's End in the extreme south of England, to John o' Groats, which is supposed to be the most northerly inhabited house on the mainland of Scotland. A great many entries of bicycles and tricars—the latter to carry two—have been received, so that the success of the venture is assured. The distance is about 900 miles,

Vanderbilt cup race here. A likely development of the year's touring tests will be a chance to fairly compare the merits of American and foreign cars, several entries of imported cars being promised for the Glidden tour, notably a Fiat and a Panhard. Something about the relative touring merits of American and foreign cars is to be learned from

of them might meet with accident, yet one of the others win the contest.

In some places magistrates are not certain that the taking out of an automobile by a chauffeur without the consent of the owner constitutes a crime. There is a tendency to call it temporary larceny, a somewhat novel species of crime.

## Mobilettes

By F. Ed. Spooner

### Coming National Endurance Contest

In the early fall it is said a grand national endurance contest will be promoted by the American Automobile Association. The president of the A. A. A., John T. Farson, is a firm believer in the efficiency of endurance runs as a means of developing and perfecting automobiles, and in this belief he is right unqualifiedly. That the makers would enter into a severe test to be run annually over a route requiring that the successful car develop every quality sought in an automobile, is undoubtedly true. Every maker to-day sends his new models out on long trips to demonstrate to his own satisfaction the results of the year's efforts. A national test, in the opinion of wise men, to be conducted under the most severe conditions and over a space of time much longer than the time devoted to any

up to my garage and get one for you." The surprise of the motorist may better be imagined than described as the farmer hurried away. He returned with the lacking bolt and said, "You are welcome to use my lathes, my bench or anything else which I have in the garage, providing you care to accept my hospitality. I am a motorist." At that time this caused so much surprise that it became the talk of the run, the motorists having become imbued with the idea that every farmer was more or less set against automobiles. Nowadays it is not out of the ordinary, in fact, it is quite in the ordinary, to see an automobile standing at the front door of the farm house or to meet the farmer bound cityward or homeward with his family in an automobile. The time is coming when the horse will not be quite so essential to the farmer, and

find in the farmers their best customers. With this era there will come such a demand for good roads as was never known before, and from the source which can best bring about good roads, the farmers. Once that movement is started and the automobilist will enter upon the millenium, while the prosperity of the country will be increased ten fold.

### Out of Gasolene

Tourists pay too little attention to matters of vital interest to them and get into trouble. There is probably no more hopeless position in which to be caught than that of running out of gasolene in a strange country far from civilization. An experience of the writer proved a valuable lesson, and now there are being fitted to his car special gasolene storage places to provide for just such emergencies. It happened on the road from Guanajay to Havana, just at dusk, and with several passengers in the car anxious to catch a train. The car acted



FIG. 19. CHATEAU DE LONGEOIS



FIG. 20. HARDLY WINKS AT AN AUTOMOBILE

other contest, would attract an unprecedented entry list to-day. The makers must be interested, of course, for they alone will support such a venture, the value of which to motoring will be enormous. It is proposed to continue such a run through several weeks, covering from four to five times the distance ever covered in a similar contest in this country; in fact, a tour which will bring forth comparatively the real value of automobiles to the purchasers relatively and collectively.

### Farmer Motorists

It was during the St. Louis run that one of the cars met with a slight accident, a broken bolt, causing a temporary stop for repairs. A farmer of the real sort found in Central Illinois took a real interest in the repairs of the car and upon discovering that the operator was in difficulty through the lack of a small part, said, "I'll just run

when the motor car will not only be a convenience but a positive blessing, both as a means of conveying the family to the city and back and also as a means of conveying the produce of the farm to market." The commercial wagon appeals to the farmer already, as he sees money saved through its use, money saved through time, cutting down of help, and so on. During the Vanderbilt race last year a truck farmer figured it all out and discovered that one motor truck would save the salary of one man, hotel expenses of two men three nights weekly and boarding of horses in town, and so on. He estimated the value of two wagons, four horses and other expenses, and was surprised to learn that the motor truck would accomplish the work of two big market wagons at about one-half the expense. The field is open, and ultimately the makers of motor trucks will

strangely and finally stopped in what seemed an unexplainable manner. Investigation finally showed the gasolene very low. The automobile ran down hill and on the level very nicely, but up hill it would not run. The passengers willingly dismounted and pushed until the top of each hill was reached, and then prayed for down-hill roads and level roads. With that gone feeling the driver, who was the writer, operated the levers carefully and sneaked along on just as little gasolene as possible, and prayed for a town. The first town brought no relief, for no one kept "gasolina." The next town came quickly, but it was also barren. The darkness was intense, and the heart beat fast as that town was left behind. The distance to the next one seemed one hundred miles, and the motor acted more strangely than ever. Finally the lights of another town were seen, and there a

little boy was picked up who knew where an automobile was stored. That auto proved to be an electric, and heavy hearts grew heavier. One short trip after another followed, and ever and anon the divining rod was pressed into service. An inch and one-half had fallen to a half inch, and yet no gasoline had been found. Finally, at a

## Persons and Things

By F. Ed. Spooner

### The Rag Shop

Sadie came to town the other day. Who is Sadie? Who was Sadie, is better. A wife and mother now and happy, years ago Sadie presided at Chicago's famous "Rag Shop." And what in the

Restaurant, across the street. Then came Sadie in charge of the table, and Sadie was a wonder. From thirty to sixty business men all in one hour did not phase her, and every one was satisfied. No tips were given except at



FIG. 21. ORDINARY FRENCH ROAD



FIG. 22. ENTRANCE TO JACQUES DE COEUR HOUSE AT BOURGES

small store, the Cuban said "gasolina," and the relief was something comparable only to the opening of the Pearly Gates, providing those gates do open for an automobile driver. The experience brought about the installing of reserve gasoline tanks at at least two places, one under the rear seat, with a faucet at the back, the other under the floor, and now it will take more miles than may be driven in 24 hours to exhaust the gasoline carried in that car, and every tank will be filled religiously before the start on any run. For the best car made won't run without gasoline, and there's no use trying to make it do so, as countless people have found out.

The annual report of the British Patent Office shows that inventors are largely concentrating their ingenuity upon automobile improvements, especially anti-slipping and anti-puncture devices and speed gears. There has been a great falling off in the activity devoted in late years to bicycles, flying machines and aerography, but there have been many developments in electricity, the latest efforts being directed at finding the best mercury vapor lamp. Improvements in railway rolling stock appliances also receive much attention from inventors.

world was the "Rag Shop"? Automobileists who were not of the cycling game know nothing of Sadie. Automobile pioneers who were also pioneers of cycling will not forget the good old days of the "Rag Shop." Just how it came to be known as such is history. In Chicago the cycle dealers, press men and traveling men, gathered spontan-

Christmas, and then it was hundreds of dollars. When Sadie wanted to ride she was given a wheel, suit and all she needed, and when she struck for higher wages and left, every cyclist left also. Like the cat, Sadie came back and her trade returned. When Sadie was married, her wedding gift was a tandem and all fittings and a riding suit.

Those noon gatherings in Chicago were productive of valuable interchanges of ideas and untold quantities of news. Every traveling man who reached Chicago showed up at the "Rag Shop," and Sadie never forgot a face nor the likes and dislikes of "her boys, half of whom never ordered but consumed without a murmur anything Sadie chose to give him.

A successful endeavor is now being made in New York to organize a "Rag Shop" at the noon luncheons of the New York Motor Club at the Hotel Cumberland. There is a most enjoyable gathering of the clans in the Palm Room, daily set aside especially for

the members who are accorded special privileges.

### Business Done On Gotham's Broadway

There's only one New York and only one Broadway. Makers who apparently throw money away by expensive Broadway stores realize all this. From the

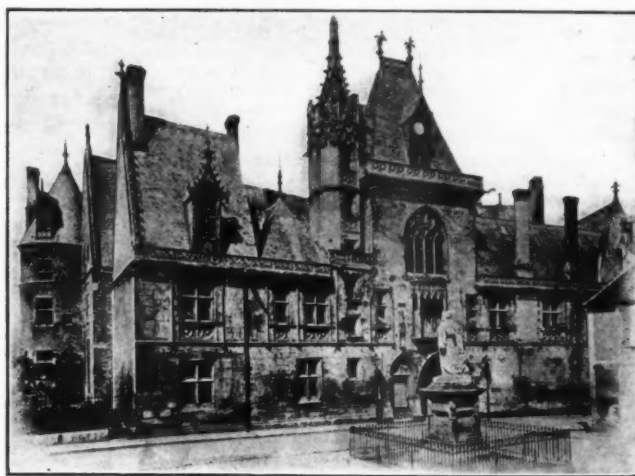


FIG. 23. HOUSE BUILT BY JACQUES COEUR AT BOURGES  
Now used as City Hall

eously for dinner in the Siegel, Cooper & Co.'s restaurant at State street and Van Buren. Forty to fifty men gathered around one long table. The restaurant, being a part of a dry goods store, was known as the "Rag Shop." Later the party moved to Paul Winter's Vienna



Atlantic to the Pacific and from Canada to Mexico, people come to "Little Old New York" and "The Great White Way." In Gotham town they wander on Broadway and care little for any other section of New York. Having seen Broadway, it is "23" for them until another year.

In their wanderings up and down the greatest business street in the world, the great automobile show with each exhibit in a handsome well-lighted building attracts them. "As goes New York so goes the country," and but a casual glance proves that automobiling is the real pastime of thousands upon thousands of New Yorkers.

The makers spend millions of dollars to advertise in mediums that last a day, a week or a month. They secure business that way and are successful because they advertise.

The makers spend other millions to fit up handsome quarters on New York's "Great White Way," and their advertising in the great papers of the country is perpetuated.

But is not alone advertising, for visitors to Broadway become impressed, and oftentimes they make their purchases in New York. The New York sales agent passes along the sale to the agent, no matter where he may be, and the customer has the satisfaction of reciting that while in New York he purchased an automobile.

One sales manager claims to have sold in New York a majority of the cars allotted to the San Francisco agent, as California people, while in New York, placed the orders.

Broadway caught them. The greatest impromptu automobile show impressed them. The number of the stores, the size of the garages, and enthusiasm of countless thousands of New Yorkers made them enthusiastic and they succumbed.

#### **Prevent Taking Out Cars Without Permission**

In the present day of irresponsible chauffeurs, when owners are required to defend themselves against liability for the actions of men who have taken cars out without permission and caused trouble, every garage door should be guarded and every owner should be apprised daily of the movements of his car. The leading garages now keep an accurate record of each and every car. The owner is required to give an order for the withdraw of his car in many cases, while in others, he may inspect the daily records at any time.

The precaution is a necessary one and should be universally adopted without a question. Chauffeurs out with friends on a carousal have caused endless scandal by causing oftentimes terrible accidents.

#### **Dealing With a "Missouri"**

No salesman should ever slight a prospective customer nor look upon the purchaser as cranky when he insists upon claiming "Missouri" for a home and wants the salesman to "show me." Many an auto dealer has kicked himself for "short changing" a customer in the game of "gab fest" when he has learned of one sale to that very man by a painstaking rival, and especially when he has learned that the one sale brought several more.

They say that the appearance of one cockroach in the kitchen conveys the meaning that six more will be found somewhere. Dealers have this year found that one satisfied customer brings more than six more, oftentimes. Business men buy automobiles, and business men nowadays are busy men, for times are prosperous. Were this not so, business would hardly be so brisk in the automobile world. Oftentimes a group of friends in the business world will decide, perhaps unconsciously, to allow one of their number who is an automo-



Geo. A. Post, President, and Robert Beattie, Jr., Secretary, No. Jersey Automobile Club

bile expert to decide upon a car. The salesman who is fortunate enough to secure the first order oftentimes does an excellent season's business directly from the initial sale.

It pays to work every prospect in this new gold field, for oftentimes the slightest trace of ore turns out to be a splendid paying gold mine. Some salesmen are first class because they follow to the very end every prospect. Other salesmen are of no account because they are easily discouraged and fail to follow up their prospective customers.

One prominent sales manager in New York carefully nursed a customer who, to his own way of thinking, was an impossible proposition. The careful handling of the customer resulted in a sale. The customer insisted upon a lot of things not in the regular line. By exercising patience the sales manager finally secured the order beyond recall and delivered the car. He was satisfied and well pleased with himself then, but his

satisfaction may be imagined when orders for eight more cars were recorded in a few days from friends of the "man from Missouri" who had to be shown.

#### **Responsibility of Owners**

Is not the employer of a chauffeur riding with his man and directing his work equally guilty when an accident occurs, and in event of prosecution should not both be prosecuted? No chauffeur cares to risk his liberty, his car and his life by driving without care. The driver must, however, do as his employer bids. Providing he does not do so, the reckless employer secures another man who will obey orders. Why not seek then for proof that a serious accident was alone due to the driver?

When the owner is along and the driver operates his car at unlawful speed without caution from his master, then is the owner alike guilty with his man. That is certain. Providing the man is a reckless driver and is known to be such, as is oftentimes proved to be the case at trials, then is the owner alike guilty for having retained a reckless man in his employ.

In a majority of instances the people injured are alone to blame for accidents caused by automobiles, but the motorist is seldom absolved from censure. People will persist in trusting to the Almighty God to preserve them from harm. They step off the curb into the street without looking, dash across the street unheeding, pass behind wagons without glancing either up or down the highway, or step off cars with no thought of danger. When the heedless ones die from injuries caused by wagons or electric cars, it is called a matter of course, and the papers mention the matter in perhaps 100 words. Let an automobile strike the unthinking one, and column stories and scare heads record the fact in the daily print. Follow-up stories cite the deadly character of automobiles.

Public opinion should be withheld in nine of ten accidents which occur in the motor world, for there are more automobiles than electric street cars in most large cities, and the latter, running on fixed roadbeds, kill and maim more thoughtless people than automobiles, which follow no fixed roadway, but travel in the most confusing and therefore dangerous manner.

#### **The Bad Samaritans**

It's a beastly shame that some of the hundreds of automobilists who pass through the country cannot meet with some terrible accident and be hung up at the side of the road to beg for assistance. It is also a shame that those of the Good Samaritan Spirit who do stop and aid a fallen member of the fraternity cannot know when they do so whether that member has ever refused assistance to another motorist. A re-



cent report of an accident to "Diamond Jim" Brady states that Mr. Brady was refused assistance for the dying Miss Waters from a lot of motorists who stopped and looked and then went on. Those of that stamp who drive automobiles should be tagged plainly "Curs," and should be run into the ditch by every automobilist and driven off the roads altogether. The writer will undertake for one to secure the numbers of machines whenever such an incident occurs to him in orders that by so doing the names of the drivers may be obtained and published broadcast. An incident of the sort occurred not very long ago on Long Island. A broken chain caused the stopping of the writer's machine and autoist after autoist passed at midnight without giving the slightest attention. One did slow, and when asked to tow for two blocks said, "What do you think I am, a common tow horse." He passed on, and two hours later, after repairs had been effected, this same gentleman was picked up away down on Hoffman Boulevard, far from home,

is necessary in this country, apparently, with a possible coat of tar and feathers just to help the thing along.

#### The Unlucky 13

William K. Vanderbilt, Jr., objected to the holding of the Vanderbilt Road Race on October 13, and so the date was set for October 6. Last year Mr. Vanderbilt did not regard 13 as so unlucky, but facts were overbearing against the men who pooh poohed 13 as unlucky. In the first place Foxhall Keene drew 13, and although he laughed at superstition nevertheless objected to the method of drawing and secured a redrawing for the German team. On the second drawing S. B. Stevens secured the unlucky talisman. The race for Mr. Keene was a success until he struck a post and threw out his man Luttgen. He had an excellent chance to win. The 13 may not have had anything to do with it. Mr. Stevens chose to travel under the figure X rather than use 13, and his car did not go a lap until it went all wrong and was withdrawn. It may not have been the 13 but then again it might.

Automobilists should beware of the number. "Senator" Morgan has always sought the number for his hotel room or for anything, but he now believes in keeping away from it. To men of the old field of cycling a hotel room the numbers of which add up 13 is not to be taken under any conditions, and a street car the number of which is 13 is passed by. Evidently Mr. Vanderbilt does not like 13 himself, and it is well.

#### Dodging Automobiles

Men who drive motors drive far too fast in Broadway, New York, for comfort, and men in the trade decry this driving again and again owing to the danger. The police do the best they can but there is a steady procession of automobiles and what can the poor men do? It would soon tire an ordinary cop to stop any but those who are extraordinarily speedy. The effort to-day is to keep the speed down to limits that are safe, and comparatively little is heard of arrests for speeding. Not so very long ago the papers were full of it. Now the drivers are more sane. Yet they are not altogether sane as was shown very clearly when Mr. H. A. Lozier, Jr., called attention from his office window to the speed of machines passing down the street. One after another flew by at greater speed than the street cars and from above it was possible to see the trouble to which pedestrians were placed by being compelled to dodge right and left to get out of the way. To cross Broadway nowadays is a hard job without one heartbeat at least and perhaps more. The steady line of automobiles reminds one of the days of old when cyclists passed down Michigan avenue, in Chicago, in an unbroken line through which at early morning and late afternoon business hours it was almost impossible to pass. Some day a statistician will stop an hour and count them as they pass, and some wonderful figures will be evolved.

#### Getting Off Backwards

There's some excuse to-day for the woman who gets off a car backwards, for by so doing she perhaps saves her life. Automobiles run along pretty close to the cars and even the man feels as though it were safer to alight with his face to the danger. Many a man and many a woman is knocked gally-west through paying no attention to the danger of being struck by automobiles when alighting from cars, and men especially jump from a car and make a rush for the sidewalk without glancing to the right or to the left. If struck they blame it to the automobilist, yet the hapless driver may not have even seen the man alighting, and it may even be that the car showed no signs of slackening its pace, for men do not always wait for a car to stop. The woman who alights with her face to the rear at least wards off danger from that direction.



TOLL GATE ON THE HACKENSACK TURNPIKE  
Within a few minutes of New York

friends or farm houses, irreparably broken down and looking for assistance. Asked for particulars he gave them and begged for a tow. It might have been an act of charity to consider his plight, but he was simply reminded of his former actions and then left to sit out a cold night and think of his sins of the past, perhaps to repent, more than likely to curse the time he refused so ungraciously to aid the only man who could give him assistance. It was learned later that this gentleman (?) did spend the night ruminating, and whether it did him good or did him no good does not matter. He got his and that is sufficient. The men who refused to assist Mr. Brady to carry a dying lady to the hospital will some day learn in a like way, maybe, to rue the day that they refused to assist. In France they blacklist a member of the French Club who refuses to go to the aid of any automobilist in trouble, and some like rule

Cyclists have learned through years of fatalities to avoid 13 as they would the plague. Johnnie Nelson, an idol in the paced world, was killed by motor 13, an Orient machine which sent no less than eight men to the hospital in terrible accidents. Jimmy Michael, another idol, was killed through an accident which occurred on May 13 in the 13th year of his career. Joe Grieblor had 13 on his back when he was killed at Lima, in '96. Archie McEachern was killed on Friday, July 13, and Earl Kiser had a terrible fall the same day. These were the only two riders to train that day. Miles and Stafford, a crack motor team, rode at Waltham with the number 13 on their backs and Miles was to be married June 13, just 13 days later. Both were killed and their accident caused the death of three others. Peterson was killed at Troy while riding under the number 13. Cyclists can cite instances almost without limit where 13 has proved a calamity.

# General Correspondence

## Multiple Cylinder Motors

By John D. Campbell

Recently the writer, several owners, and two prospective owners of automobiles met, and the talk, of course, turned on the merits and faults of the several types of machines and what was better, a four or a two-cylinder motor?

The four-cylinder motor was mentioned as a luxury or refinement in "auto" motors which was all right for those who could afford it, when high power was required, or when not more than 12 to 15 H. P. was called for; that two cylinders were sufficient, but beyond that power the vibrations would be excessive unless a very heavy flywheel was employed. The opinion was given that it was useless to employ a motor with four cylinders with a corresponding number of parts to be treated and maintained if a car with two cylinders would do the work; the motors would take less space, and, as two is a multiple of four, the explosions in a given number of revolutions would be at regular intervals, the tension on crank shaft would be regular or at regular intervals, and, that such being the case, the same weight of flywheel would do as for a single cylinder motor of the same diameter as one cylinder of the two-cylinder motors.

I find that this opinion is held, not only by amateurs, but by many mechanics.

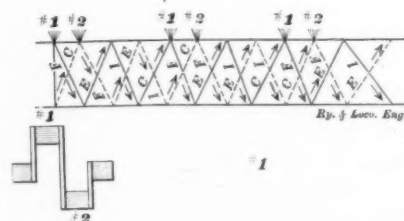
A study of the matter does not confirm this and advocates of the four-cylinder motors for any car whatever power is used. While the number of parts is increased with a four-cylinder motor, the resulting benefit is, better service, steadier car, and better distribution of power.

As an illustration of what is done in the cylinders of a two-cylinder motor and to prove that the time of power is not evenly distributed, let us follow the work as shown in Diagram No. 1. The work of one cylinder is shown by full lines and the other by dotted ones.

With vertical cylinders, side by side, commencing with an explosion in cylinder No. 1, No. 2's pistons will be at the bottom; as No. 1 advances, No. 2 will commence to compress and at the up end explosions will take place. This gives two explosions in one revolution of the crank and none will take place again until two revolutions have been made, when the same thing will be repeated and at the same intervals as long as the motor runs.

If the timing is made that No. 2 cylinder

will exhaust on the upstroke following the explosions in No. 1, the grouping of the explosions will be the same, but No. 2's explosions will precede that of No. 1.

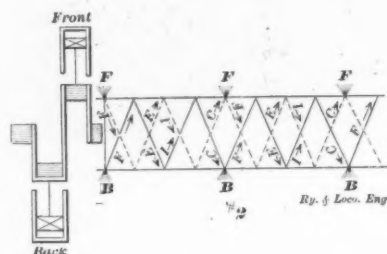


Expressing the work done by a table will prove the diagram and grouping of explosions:

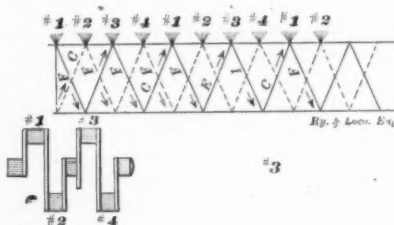
Cyl. No. 1. Fire Ex. Ind. Comp.

Cyl. No. 2. Comp. Fire. Ex. Ind.

This not only shows the grouping, but that the flywheel must be of sufficient weight to take up the power of two successive explosions, to prevent shock, to give steady running, and to store energy until the next explosions.



With horizontal and opposite cylinders the same operations take place. This is shown in Diagram No. 3.



Ignoring the question of power, it is here that the four cylinders come in and take up the intervals which the two cylinders miss and give an equal time of strain upon the crank, as is seen in Diagram No. 3.

This is again proven by the following

table, in which the firing takes place in successive steps in the four cycles:

Cyl.	1	2	3	4
Fire	Comp.	Ind.	Exh.	
Exh.	Fire	Comp.	Ind.	
Ind.	Exh.	Fire	Comp.	
Comp.	Ind.	Exh.	Fire	

Four-cylinder motors are now the rule, we may say the standard. They were not adopted to give greater power than could be readily gotten with two cylinders, but because they give the result in a steady, continuous power, an important matter in running a car and in its up-keep.

## Horse Power of Boilers.

By Roger Atkinson.

The use of the term "horse power" to convey an idea of the size of a boiler has become "as dead as Julius Caesar" for many years, just as the term "nominal horse power" has also gone out of use, though it was formerly used to express the size of an engine. Both expressions have become practically meaningless, due to the natural course of improvement. The nominal horse power of an engine was originally based upon a definite piston speed in feet per minute, and those who are curious may find various rules on the subject in old publications.

As engines were improved and used less steam to produce a "horse power," the horse power of any given boiler was increased in rating or performance with each reduction in the steam required, and in addition the boiler itself was improved, and new designs were brought out which gave greater results in quantity of water evaporated per pound of fuel consumed. James Watt fixed upon 1 cu. ft., or 62½ lbs. of water evaporated per hour, as the standard horse power of a boiler. Other engineers made rules based upon such standards as 1 sq. yd. (9 sq. ft.) of heating surface, or 1 cu. yd. of capacity. Such boilers were supposed to require 1 sq. ft. of fire grate surface to develop the unit 1 h.p. These rules, which were useful enough and sufficiently accurate in their day, have all given way to a common standard and this is the amount of water evaporated "from and at" 212° F., which is 34½ lbs. In common practice this is equivalent to about 30 lbs. of feed water at 100° F. evaporated at 70 lbs. gauge pressure. The term "from and at 212° F." means, from water at 212° F. into steam at 212° F., that is, at atmospheric pressure, and it is calculated from the actual amount of feed water at the temperature of the supply, and the

temperature of the steam at the boiling point corresponding to the pressure carried in the boiler, so that all boiler performances may be compared upon an accurate basis. This allows for, first, the number of units of heat required to raise the temperature of each pound of feed water up to the boiling point, and, second, for the units of heat required to convert each pound of the water into steam at the same temperature.

For ordinary rough calculations the amount of water actually evaporated by the boiler during test is reduced to the equivalent evaporation "from and at 212° F." in the following way: For each pound of water raised from the feed temperature at 100° F. to the boiling point for steam at 70 lbs. pressure which is 316° F., we have to allow one unit of heat for each degree  $316 - 100 = 216$  units. Then we have to add 893 units of heat required to convert each pound of water at 316° F. into steam, which is the latent heat of steam at 70 lbs. gauge pressure, thus making the total  $216 + 893 = 1,109$  units of heat absorbed per lb. of water. Now it takes about 966 units of heat to convert one pound of water, from water at 212° F. into steam at 212° F. at atmospheric pressure. So that it takes  $1,109 \div 966 = 1.148$  times as much heat to raise water from 100° F. to steam at 70 lbs., as it does to convert water at 212° F. into steam at 212° F., and if we apply this rule to the standard mentioned above, that is, 30 lbs. of water per horse power, we get  $1.148 \times 30 = 34.44$ , or about  $34\frac{1}{2}$  lbs. per horse power from and at 212°.

If we take as an average the evaporation due to the burning of 1 lb. of coal as  $7\frac{1}{2}$  lbs. of water, we would have 4 lbs. of fuel consumed for each horse power developed by 30 lbs. of steam. This may be taken as a common standard for ordinary stationary engines in fair order. If this steam were used in a modern high pressure compound condensing engine requiring only 15 lbs. of water per horse power, indicated, we should get a horse power from 2 lbs. of coal, or the boiler would be developing twice its former rated horse power.

The number of square feet of heating surface required to evaporate 30 lbs. of water varies greatly according to the type of boiler and the proportion of grate area, but generally speaking, the Lancashire type, where the ratio of heating surface to grate area may be from 15 to 1 or 25 to 1 requires about 7 sq. ft. Multitubular boilers with ratio of 30 to 1 or 40 to 1 require about  $4\frac{1}{2}$  sq. ft. of heating surface per horse power of 30 lbs. water evaporated. Locomotives generally require about 3 sq. ft., but in rare cases, records have been given where 1 h.p. has been shown for 1 sq. ft. These records, however, must be considered largely fictitious, as the

horse power shown by the indicator diagram taken when running down hill can be made very high and be very misleading.

### Purifying Gasoline

Editor AUTOMOBILE MAGAZINE:

I have been watching in the pages of your popular magazine and other sources of information for some time to see if some mechanical or chemical genius would arise and tell us how to purify gasoline. If such a one did come, there are many who would arise and call him blessed. Foreign matter held in solution or otherwise is the source of many of the automobile troubles of today. The first appearance of the trouble

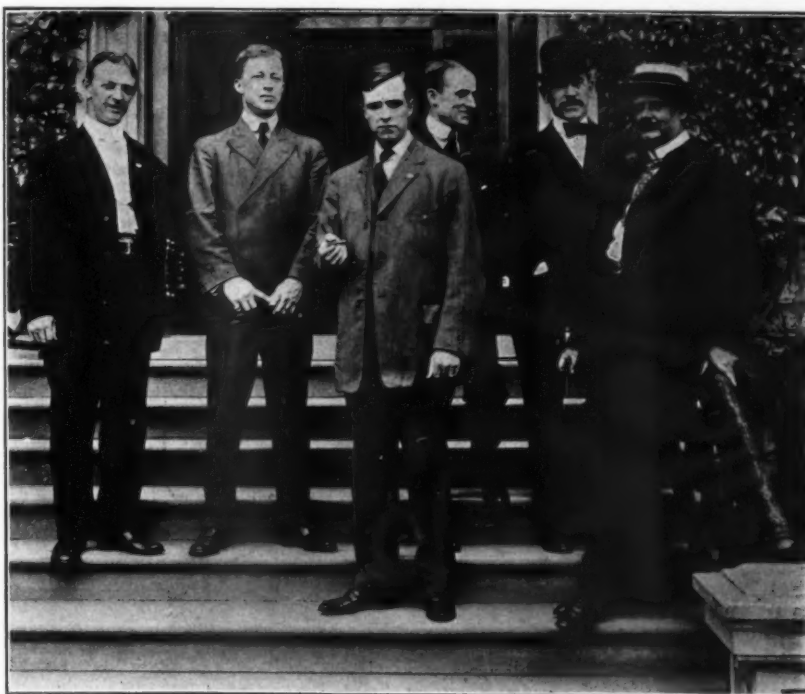
other bodies in solution that become crystallized under heat or that become glutinous by atmospheric action. If the gasoline could be held in suspense by some heavier liquid, as silver is held by lead while in solution, it is not unlikely that the organic impurities might precipitate themselves to the bottom. It is a consummation devoutly to be wished and deserves the attention of the inventors of our time.

J. C. BIRNIE.

Newburgh, N. Y.

### New Jersey Legislature Favors Lobbyists

For ways that are dark and for tricks that are vain the New Jersey Legislature is peculiar. It would be difficult to find



THE A. A. A. ACTIVE WORKERS

G. W. Post, Geo. T. Farrington, Secretary Sidney S. Gorham, Windsor White, A. R. Pardington and L. R. Speare

may be traced in the base of the float chamber where, after a few days' service, a kind of gelatinous substance will be found clogging the carbureter. Following up the course of the liquid its pernicious effects can be seen in the corrosion of the brass portions of the engine with which it comes in contact, and which can only arise from the presence of an acid in the gasoline. The gathering of soot in the explosion chamber and in the muffler can only be accounted for by the presence of a resinous or organic matter in the material exploded. The usual filtering or screening process does not begin to reach the matter, for while an ordinary gauze screen or cloth may prevent the admission of visible atoms they do not prevent the admission of minerals or

a more corrupt legislature, and it was quite in keeping with the character of the members that they rejected with indignation an anti-lobby bill almost the same as a bill passed by the New York Legislature. In approving this bill Governor Higgins wrote:

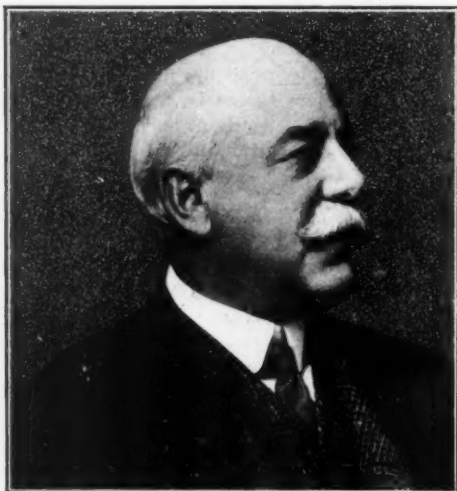
This bill aims to insure publicity as to the relation of attorney and client and principal and agent existing in connection with legislative matters, and thereby to prevent secret lobbying and the use of so-called "yellow dog" funds, and I approve it for the reason that it is a measure of importance to remedy a real evil.

Any person wishing to obtain the index of Volume VIII will be supplied on application to this office.



## Portrait Gallery of Leaders in the Automobile World

Will be continued till all prominent Automobilists have appeared



**E. R. THOMAS**  
President, The Thomas Motor Co., Buffalo,  
N. Y.



**ALEX. Y. MALCOMSON**  
President and Treasurer, Aerocar Co.,  
Detroit, Mich.



**EDWARD LOZIER**  
Lozier Motor Co., New York.

### The Modern Robber Baron

In the olden times when physical might exerted the power of robbery, it was a common practice for an enterprising robber to build a stronghold on the edge of a pass used by travelers who were regularly relieved of part of their valuables before permission to proceed on their journey.

North do not think it necessary to provide themselves with Pennsylvania license and signs. The public robbers of Portland are thriving on this omission.

A correspondent of the N. Y. Mail writes: Every automobile that has passed through Portland this spring has been stopped, and, unless carrying a Pennsylvania license and Pennsylvania

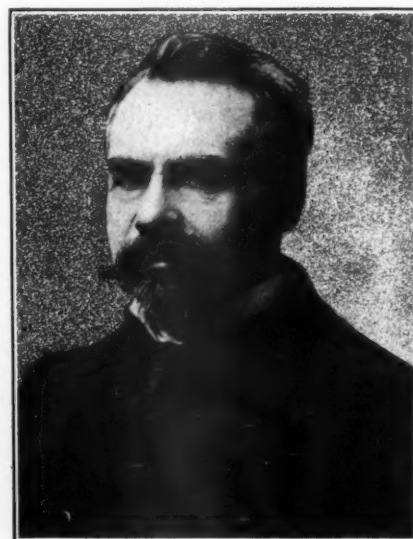
and calls to stop, and you have to, whether you want to or not. Then the farce begins. He asks if you carry Pennsylvania numbers. You reply "No." Then he says he must demand to see your Pennsylvania license; you admit having none. Then he orders the car into a side street and sends for the justice of peace.



**R. E. OLDS**  
President, Olds Motor Car Co., Lansing, Mich.



**ALEXANDER WINTON**  
President, Winton Motor Carriage Co.,  
Cleveland, Ohio.



**THOMAS B. JEFFERY**  
President, Thomas B. Jeffery & Co., Kenosha, Wis.

The modern method of holdup is quite as effective as the old one. There is, on the Pennsylvania side of the Delaware river, a small hamlet called Portland. Vehicles going from the New Jersey side have to go through this clachan on their way to the Delaware Water Gap. The journey in Pennsylvania is so short that automobilists from New York and the

numbers, back and front, and no other numbers, the owner or operator has been fined \$10 and costs; total in every case, \$11.85. There is no chance of escape, either, as the chief of police, in uniform, stands in the middle of the road at a narrow point, and an old wagon pulls out from the side and completely blocks the way, the chief throws up his arms

They hold office in an old barn, read you the law and fine you. In my case I told them I would turn back, that I had intended spending Sunday at the Gap, but would not stand for treatment like this; but the justice of the peace said: "Oh, you can go on. When you come back we won't hold you up again." So rather than spoil our trip, we did so,



and found that all cars passing through Portland this season had met the same fate."

#### Evil Sentiment Against Thrift

There seems to be something wrong with public sentiment these days. In old-fashioned times not so far gone, a man who was diligent in his business, far-seeing and careful to spend less than

that makes inordinate wealth a consuming passion and pursues it regardless alike of human feeling, decency and law. And that type, anarchistic in its utter unscrupulousness and its inhuman, machine-like malevolence, must go.

#### Tire Tests

An exhaustive series of tests recently made in New York city by the General

The reason for this is apparent when the construction of tires is taken into consideration, pneumatic tires being compressible and solid ones incompressible so far as practical purposes are concerned.

The pneumatic tires would run over or around small obstacles in their path, the tire being indented without raising the vehicle, while the solid tire must either raise over any obstacle or the



CHARLES E. DURYEA  
President, Duryea Power Co., Reading, Pa.



CHARLES A. MOORE  
President, Manning, Maxwell & Moore,  
New York



E. B. JACKSON  
President, Chadwick Motor Car Co., New York

he earned, habits that made him rich, he was respected and admired as a man worthy of imitation. The trend of sentiment to-day is in the other direction.

Electric Company is valuable as furnishing data that may be advantageously used in the kind of tires best adapted for special traffic.

rubber becomes distorted. It was the continual lifting of the car over the many small obstructions which form a rough road that consumed the extra



JOHN RAINIER  
President Rainier Co., New York



J. H. BULLARD  
President, Bullard Speed Recorder, Springfield  
Mass.



A. E. MORRISON  
The Morrison-Tyler Co., Boston, Mass.

When it becomes known that a man is prosperous and saving money, critics begin to show that he is a dangerous personage. He is no longer an individual, but a type—a type of all that is greedy, of all that is base and heartless, of all

The tests served to demonstrate the varying efficiency of solid and pneumatic tires, the latter type absorbing about 15 per cent. more energy on smooth pavements than solid tires, though they are better for rough roads.

amount of energy and made solid tires less efficient for such service.

The tests further showed that cars equipped with anti-skid or puncture-proof leather treads used up more energy than plain pneumatic tires.

## A Southern Business Genius

By F. Ed. Spooner

One of these days the Hon. Bill Jones, of Macon, Ga., will perhaps criticise the A. A. A. and then turn round and try to buy the organization in order that he may operate it to suit himself, and for the good of the general community. At any rate, it is quite probable that Macon will ultimately be represented on the A. A. A. official list and not at all improbable providing Mr. Jones maintains his present stupendous rate of enthusiasm, that Macon will supply the President for the A. A. A. at some not very distant date. For the Hon. "Bill" Jones is a man who will devote not only his time but his millions to scoring a success providing he takes hold of anything.

From Macon come many stories of the eccentricities of Mr. Jones. In the first place it should be known that he is a man of wealth and that he is a lucky

At another time Mr. Jones did not like the manner of attractions put on at a theater, so he bought the theater and it made money, too.

Finally he took a liking to automobilizing and a car was purchased. The local garage overcharged him and was run in a slipshod way. The Hon. Wm. Jones immediately purchased the garage. The owner had been purchasing cars from the makers on orders only, and Mr. Jones changed this and started purchasing cars outright for sale. The business thrived amazingly and now Mr. Jones is on the go all the time securing new agencies and hastening deliveries.

He promoted automobile meets in Macon and advertised them for pages. They paid a profit each time, and, of course, boomed the business to the resultant good of Mr. Jones.



HON. BILL JONES, OF MACON, GA., IN HIS FRANKLIN KNOWN AS "CHOCTAW."

man. Everything he touches turns to gold, for his business acumen is more than keen. It was years ago that Mr. Jones, then dealing in horses, took a dislike to the way the local track was being run. He purchased the track. It has paid ever since. He started a political campaign and the local paper, I believe it was the News, knocked him. He bought the paper and it has been successfully run ever since, to the liking of Mr. Jones it might be said. It was some time ago that a circus wintered at the track and Mr. Jones was looking it over, when invited to mount a mule. This proved to be a trick mule, and at a snap of the owner's fingers it threw him headlong. "For that I'll buy the circus," said Mr. Jones. He bought it and sold some of the animals for more than he paid for the outfit, returning the wild animals to the circus owner and ordering him out of the grounds with them.

At the Atlantic Beach meet, near Jacksonville, Mr. Jones appeared with his Choctaw, a Franklin, but had hard luck. Certain cars won there and whenever a car won he made an effort at once to buy that car to put on at his Macon meets and to sell. It is not on record that he secured any cars, but he had the fun of flashing a roll as big as Sandow's arm.

So prominent did Mr. Jones become at this meet that he was elected president of the Southern Federation of Automobile Clubs, and he is now working tooth and nail to bring together all automobile interests in the South in order that by co-operation a trunk line highway may be constructed from the Mason and Dixon line to Jacksonville. Branches of this road will connect all the large cities with this main trunk line.

Late newspaper reports state that Mr.

Jones brought some of his political friends to Macon, put them up at a hotel, was ill treated and overcharged, too, so started the erection of a new hotel and a grand one at once.

In Macon this Southern Hustler is Chairman of the Road Commissioners, a member of the Board of Aldermen and a worker for improvement of the streets. In fact, he is a genuine "Live Wire," as they tell of them to-day, and his blood runs strongly in spite of the fact that he is a Southerner bred in the purple.

### Ford Saw It First

There is a scramble among automobile designers to take advantage of the recent popularity for the 6-cylinder car and four or five prominent American makers claim, each, that he "saw it first." Henry Ford can rightfully claim premiership among American designers for the appearance of this type of car, he having entered a 6-cylinder car in competition at Ormond in the winter of 1903-04. In the same year, however, an English Napier 6-cylinder car also competed, and it is only fair to state that in this regard our British cousins were a year or two ahead of us, for the 6-cylinder touring car had already become standard there and had already gained considerable headway in popularity. Until within the last few months it has been known in this country only in the speed class.

The wonderful popularity of this type of car is shown by the rapidly increasing demand for it in the larger cities—New York, Boston and Chicago—in each of which cities last week a number of cars were sold equal to the entire output of the big Ford factory for that week. The plant is now working day and night in the effort to catch up with the demand.

### These Dogs Will Not Suffer from Toothache

George C. M'Lean, of Janesville, Wis., a dog fancier of some repute, propounds the theory which he has put into practice that canines are better without teeth. Mr. M'Lean has made the dog a study and owns some fifteen prize-winners. In studying the dog and its habits he has come to the conclusion that the canine teeth are as useless to the dogs as the horns are to a cow. Mr. M'Lean states that the removing of the teeth can easily be accomplished by nipping them off at the gums. The animals will thus be rendered entirely harmless, the danger from dog bites eliminated, and the canine race become peaceful, domesticated animals. Mr. M'Lean has all his dogs doctored in this manner, and declares that they are eating similar food as they subsisted upon prior to having the teeth abstracted.





A PRACTICAL JOURNAL OF  
AUTOMOBILING AND  
ENGINEERING

THE AUTOMOBILE PRESS

ANGUS SINCLAIR, President and Editor

F. ED. SPOONER } Associate Editors  
JAMES KENNEDY }

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#### Our Change of Form

The change of form of the *AUTOMOBILE MAGAZINE* was made for two leading reasons: First, because nearly all other automobile publications being of a large size we were frequently embarrassed through the engravings belonging to advertisers being too large to fit our small page. The same objection applied to the reading pages, which were too small for cuts that would properly illustrate many scenes that we wished to display of liberal size.

With the change of form we intend to inaugurate a change of policy. For four years the *MAGAZINE* management has kept the reading pages and the advertising pages strictly divorced; our patrons receiving the same treatment as those who gave us no support whatever. That policy was not agreeable to the man who was paying the bills, but he had hired a manager and considered it fair that the latter should have a free hand. Now the man who pays the bills is at the helm, and he intends steering the craft so that its friends and supporters shall enjoy all the help that the magazine can give.

The intention is to make *THE AUTOMOBILE MAGAZINE* the most interesting, the most helpful and finest illustrated publication in the field. No effort will be spared to magnify its attractions. While automobile subjects will receive the greatest attention, popular engineering will figure more largely in our pages than it has hitherto done. The bicycle and the automobile are making Americans amateur engineers, so we have decided that they will enjoy the discussion of engineering subjects treated in an intelligible and attractive manner.

We launch the new form and the new policy in full confidence that the *MAGAZINE* will be endowed with more intrinsic merit than it has hitherto possessed. On these terms we appeal for the continued support of all old friends and for the patronage of the increasing host of automobilists.

#### One Way to Keep in Touch With Automobile Progress

From the beginning of each year until the automobile shows are over, the majority of motorists—as well as the great army of the almost-persuaded—are on the keen lookout for all publications issued by the automobile manufacturers. They write numerous inquiries to the factories, visit local garages and attend auto gatherings of all kinds in an inquiring mood, at most of which places a pamphlet, booklet or catalogue is to be had for the asking, even if it is not sent or handed out as a matter of course.

As a result, the opening of the outdoor season finds the average household and office well equipped with this kind of literature. But usually there is neither time or inclination to go through the accumulation, no matter how good the intention. So it either gathers dust where it is or is thrown out with other impedimenta at "house cleaning time."

In the meantime, the manufacturers' labors in this direction have by no means ceased, for no matter how much time, money and labor have been given to the production of an automobile catalogue, it is rarely sufficient to let it stand without some addition or some amendment, for the entire year for which it was issued. Not necessarily that the vehicles it describes have been materially changed, or that a few months have made it a back number among its kind. More likely something has happened in the sport or industry, or both, of particular interest to the machine of its type. And it is "good business" to follow up the new developments.

Perhaps the new agent in one of the larger cities wishes some of the maker's literature, with his own imprint upon it, for local use. Such a time is opportune for carrying the information of the regular catalogue a little farther along in a supplementary booklet. Or sales prices may change between seasons, since it is no uncommon thing to find that a new selling price has been handstamped over the figures as printed in the first edition of the catalogue.

Both of the national shows (and some of the local ones) bring out a great many pamphlets and circulars for their special use; likewise any great event on the road or track is shown up in print. This sort of literature often either anticipates or supplements the more pretentious catalogue. Every season, in

fact, brings out some good points, which the makers and agents find it worth while to incorporate into their later publications.

The height of the summer, however, always finds the family of the year's automobile catalogues and booklets practically complete, and in shape to stand for the balance of the year. The "advance announcements" and "preliminary sheets" have all done their work; and given place to the larger and better productions, of which they were forerunners. Taken as a whole, the result for this year is even ampler and better than the promises of show time would have us believe, and one who is interested in that sort of thing may very likely be led to bring his collection or library of automobile trade literature up to date. In so doing he will add to his store of reference and information a great deal of data that was not so easily available earlier in the year.

Some of the complete catalogues that were issued in time for distribution of the winter and spring shows have since come out in new editions with additional material. Larger forms and much better illustrations are the rule in nearly all cases. So the reader of *THE AUTOMOBILE MAGAZINE* who is interested in the latest developments in any particular line of motor vehicles, should send to the manufacturer or nearest agent for the latest edition catalogue of that line. The information gained thereby will invariably be found worth while, and one may often be surprised at the new things which even three or four months may bring forth.

#### Combined to Secure Justice

A common fault of all combinations of people for social, commercial or sporting purposes is that their tendency is to exonerate their members from blame even to the extent of defending them when the laws of the land have been defied. Automobile clubs have been very lax in the spread of sentiment in favor of obeying the road laws and not a few automobilists have joined clubs with the idea that they would be defended if prosecuted for violating speed laws, and in too many cases their faith has been well founded.

Knowing the evil effect this has on public sentiment, we are pleased to note that the Automobile Owners' Association has been formed in Massachusetts which will perform the double function of defending its members from unjust prosecution and will also prosecute members who are found violating the speed laws. An important work to be done by this association is changing the existing law concerning fines.



Under the law, says the Boston Transcript, a fine imposed in a lower court goes to the town or city making the complaint, and the persons making the arrest receive witness fees. Under these conditions some places where automobiles are numerous have found that the trapping of them on Saturdays and holidays is a pleasant and profitable occupation. All towns which have automobile traps are not open to the allegation of enforcing the law for purposes of revenue, but enough have been suspected of this motive to give a very general impression that such is the fact. This is strengthened by the fact that arrests are made for a very slight infraction of the law and that traps are placed in locations where moderate speeding is least dangerous.

To combat these police traps the automobilists began last fall a policy which it is expected will be followed up quite generally this year. This is the appealing of their cases. In many instances the automobilists who have been arrested did not contest their cases, as they could not spare the time, and pleaded "nolo" and paid a fine. In other cases they pleaded guilty. It was found, however, that by appealing the cases to the Superior Court the chances of acquittal were improved, and even if a fine were imposed, it would go to the county, and not to the town.

This, however, is not the only direction in which the association intends to become active. The members realize, as do automobilists generally, that much of the trouble to them as a class is caused by the careless or reckless driving of a few; that one driver showing no regard for the law may be the cause of the enmity of a whole community. The association will, therefore, try to discourage reckless driving, but prosecuting actively cases which are brought to its attention. It will use the facilities with which it is equipped to discover automobilists who drive without regard to the law, and to have them properly punished and excluded from the ranks of automobilists by securing the revocation or suspension of their licenses. The association plans also to take an active part in legislative work, and it will also try to work along the lines of the Touring Club of France, in providing information for automobilists concerning routes and local conditions. The Automobile Owners' Association does not intend to infringe upon the provinces of the local clubs or the national associations, but will take up the work for the automobilists in a sphere which hitherto has been little touched upon by other organizations.

### Canadian Laws

We have been somewhat severe on the Jersey lawmakers for limiting the speed of automobiles and allowing grocery wagons and other vehicles to keep up a go-as-you-please gait, but on further investigation we find that we are still better off than our Canadian neighbors who are restricted to six miles an hour under penalty of being fined and confined. This is the more remarkable in view of the fact that the Canadian government recently heaped honors and emoluments upon a young man who was fortunate enough to win a foot race against a nondescript crowd of pedestrians at Athens. The young Canadian athlete ran at nearly twice the speed that the automobilists are allowed to go, and it is claimed that he was not hard pressed at that.

In Montreal a number of otherwise respectable people have been already branded as criminals for allowing their machines to surpass the funeral gait allowed by law, and we would respectfully suggest that the Canadian legislators in the profundity of their wisdom should promulgate an edict against allowing automobiles to be built, or introduced into the Dominion, capable of surpassing the legal speed limit. This would strike at the root of the alleged evil. Love of speed is a primary instinct, and to be able to run sixty miles an hour and to be confined to six is a clumsy perversion of natural instincts, begotten of stupidity and of questionable moral effect.

### Pushing the Cause of Good Roads

Among the rural population of the country there is considerable opposition to the movement in favor of good roads, but the origin of the opposition nearly always lies in the fear that automobilists will be the gainers. Of course, the extension of good roads will be conducive to the comfort of automobilists, but farmers and other rural residents using wheeled vehicles will be the greatest beneficiaries from the construction of passable highways.

The legislation which Senator Armstrong has been advocating in the interests of good roads deserves the support of every patriotic citizen. In the amendments to the highway laws he proposes that during the year 1906 the State Engineer and Surveyor shall consult with the Boards of Supervisors and the Town Boards of each town, and place upon a county and town map the highways in each town deemed of sufficient importance by the Town Board to be the main market roads suitable in their opinion to be a part of a county system of highways, and the roads so designated for improvement on this map are not to be limited in mileage.

From this map the State Engineer is

to prepare and submit in his annual report of 1906 to the Legislature a map showing which highways of those above designated he deems most important and to be first improved, taking into consideration the greatest volume of tonnage carried in each locality and the accommodation provided for the greatest number of people. The maps are to be open for public inspection, and are to form an equitable apportionment of the highways to the respective counties. This one amendment to the act will stop the chaos of petitions which has been the outgrowth of the old system, and creates an intelligent and well-defined plan enabling the counties and the State to be gridironed by the development of their main market roads, and then to proceed in the improvement of them in a systematic way. It will also show that if there is not sufficient money to improve all of the roads that are now wanted, that there is certainly money enough for ten years' work, and during that ten years any additional money that is needed can be provided for by a vote of the people.

### Change of Tide

During the past three years American tourists in Europe have grown into the habit of using American cars instead of the foreign machines which were formerly considered indispensable for travel abroad. This would seem to indicate that the American product will shortly come into competition with the best foreign cars on their own ground. While up to the present time a great many foreign gasoline cars have been sold in the United States and comparatively few American cars have been sold in Europe, it is evident that the conditions are beginning to change and that before long our export figures will show many instances of high powered American machines shipped to European purchasers. American electric carriages have long been popular in England and France and several hundred Columbias are in use in the cities of London and Paris.

### Automobile Schools

Many inquiries have come to us from both city and country in regard to automobile schools. An all-comprehensive answer to these queries is an intellectual impossibility, but it may be said in a general way that the poorest of these schools are of some benefit to the individual seeking information in regard to the construction and running of an automobile. The schools promise too much and perhaps too much is expected from the students. A three months' course, with about three hours of work each week, and a short lecture between times with lantern slide illustrations following each other in endless rapidity,

will not make even a poor machinist out of a good coachman, and this is what seems to be expected.

At the same time, if the pupil is of a studious disposition and has a natural bent for mechanics, he may even in that short period gather sufficient superficial information to know in a general way what is going on during the running of an automobile. It may be added that to be a machinist is not altogether necessary in the running of an automobile any more than it is in the running of a locomotive, but it must be remembered that in locomotive running several years' experience as a fireman is indispensable to become an engineer. The automobile is the more complex of the two machines, and a kind of prejudice is springing up against the graduates of the schools. As time progresses the machine shops will likely furnish the best chauffeurs, with this qualification, that the accomplished machinist chauffeur will never exactly fill the position of flunky chauffeur, which seems to be in demand in some quarters at the present time.

#### Tractive Effort of a Motor

The torque of an electric motor is practically the pull, in pounds, which a cable would give if wound on a drum so that the center of the cable is 12 ins. from the center of the drum which is keyed to the armature shaft of the motor. The word "torque" comes from the Latin "torqueo," "I twist."

The tractive power of a locomotive, whether steam or electric, is practically the amount of drawbar pull, in pounds, which it can develop. Newton's third law of motion is, briefly, that action and reaction are equal and opposite, and if a locomotive gives a drawbar pull of 20,000 lbs., it must have something to pull against, like a man with his feet on the ground, and, in the case of the locomotive, that something is the friction between its wheels and the rails it stands on.

If the torque of a motor is, say, 25,000 lbs., and the driving wheels of the locomotive are 48 ins. in diameter, and supposing the motor turns the driving wheels without the aid of any toothed gear wheels, the problem is practically one of levers. In this case the power is 25,000 lbs., and, multiplied by 12, the radius of the armature, gives 300,000. This, divided by 24, the radius of the driving wheels, gives 12,500 lbs., and that is the tractive effort of the locomotive. If we had taken the diameter of the driving wheels, instead of the radius, we would have to have multiplied the torque by 24 instead of 12, but the result would have been the same.

If, however, the motor is a geared one, the formula has in it a fraction which takes the toothed wheels into

account. In the formula the first fraction is the same as in the previous example, torque 25,000 lbs., multiplied by 24, divided by 48. This result must now be multiplied by the fraction having to do with the toothed wheels. Suppose the pinion to be 10 ins. in diameter and the gear wheels 30 ins. The formula then becomes

$$T = \frac{25,000}{1} \times \frac{24}{48} \times \frac{30}{10}$$

and the tractive effort here works out 37,500 lbs.

Let us now suppose that there is a frictional loss of 20 per cent. in the toothed wheels, run at the high rate of speed which these motors usually are. We have the gear factor as before, 30 divided by 10, and now the gear efficiency fraction,  $\frac{8}{10}$ , as well. If there is 20 per cent. of the power used up in simply turning the toothed wheels, they will give out, as useful work 80 per cent. of the power put into them and the train of toothed wheels is said to have a gear efficiency of .8 or  $\frac{8}{10}$ . The formula now is

$$T = \frac{25,000}{1} \times \frac{24}{48} \times \frac{30}{10} \times \frac{8}{10}, \text{ or } 30,000 \text{ lbs.}$$

The fraction representing the toothed wheels, when used in the formula, will give the same result if the radius of the pinion and that of the gear wheel be taken, or if the number of teeth in each are taken, but in any case the gear efficiency is one of the factors. It must be remembered that the value of the pinion will be in the denominator of the fraction, and that of the gear wheel will be in the numerator.

The general formula for the tractive effort of a direct driving motor is

$$T = \frac{\text{torque} \times 24}{\text{dia. driver}}$$

and the formula for a geared motor is

$$T = \frac{\text{torque} \times 24}{\text{dia. driver}} \times \frac{\text{dia. gear wheel}}{\text{dia. pinion}} \times \text{gear efficiency}$$

Standard Electrical Dictionary. By Prof. T. O'Connor Sloane. Published by Norman W. Henley, New York. Price, \$3.00.

This book has 682 pages and 393 illustrations. It is a practical handbook of reference, containing definitions of about 5,000 distinct words, terms and phrases. In publishing the Standard Electrical Dictionary the author has adhered to what the work purports to be, exhausting the subject of electrical terms, giving each title the clearness of explanation necessary to make the understanding of it complete without unnecessary elaboration. In this work every electrical word, term or phrase will be found intelligently defined. Electricity is used in some form or other on many steam railroads, for driving shop tools and for lighting, where it

is not employed as a form of motive power. The student, workman or shop foreman will find this a useful book. It is more than a dictionary in the ordinary sense. It is a book of reference. The terms are arranged in alphabetical order, and there is an index at the back in which the more important words are arranged so that ready reference to the definitions may easily be had.

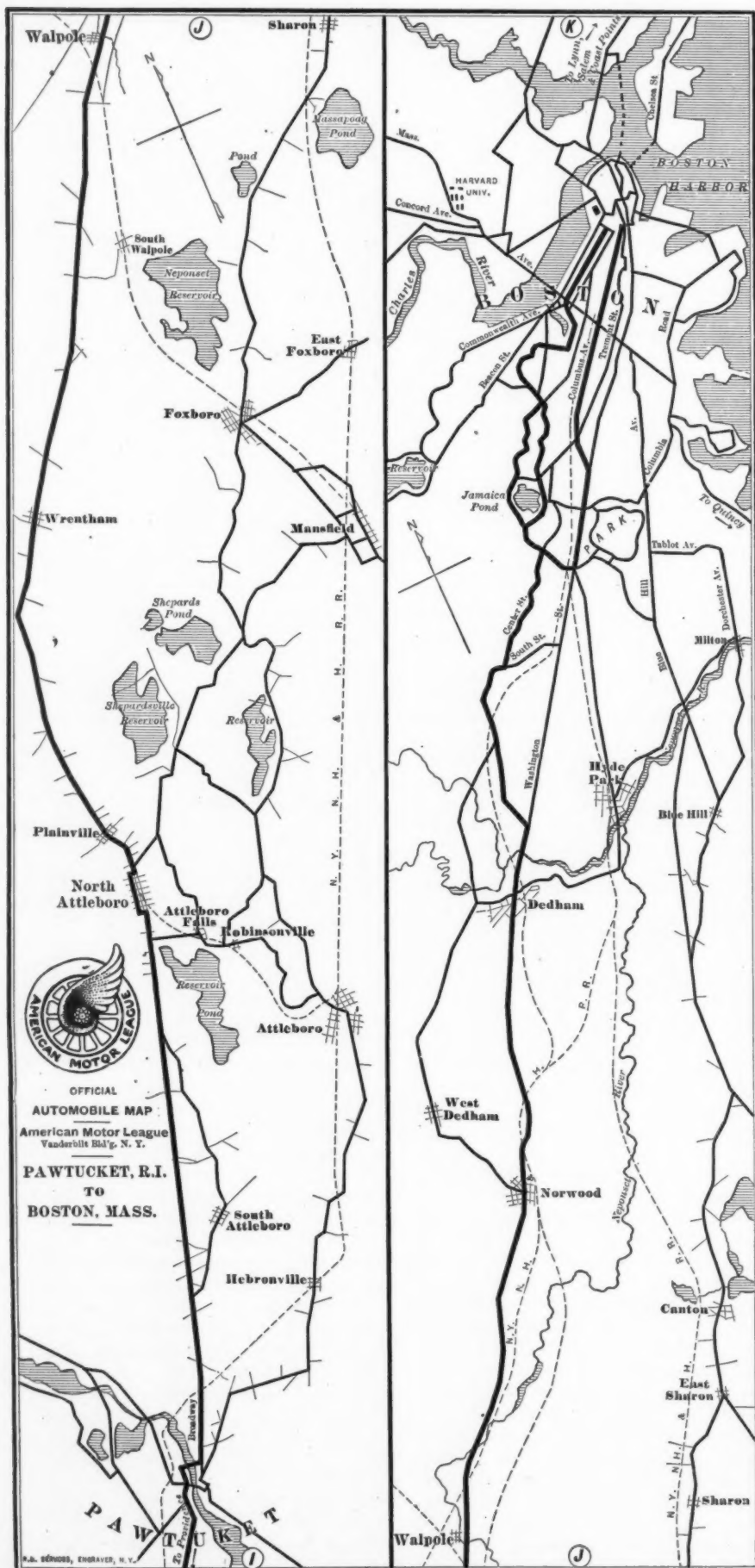
A number of prominent manufacturers do not by any means share the opinion of some motorists that the two-cylinder car is virtually a thing of the past except for strictly runabout types. One of these is President Budlong, of the Electric Vehicle Company, who says there are many sound reasons for favoring the two-cylinder opposed engine for powers from 10 H. P. to 20 H. P., and one of the three Columbia gasoline cars made by his company this year has this type of engine. All advocates of this construction submit that the double opposed engine is beyond question the simplest to care for, the least expensive to maintain and as efficient as any that can be devised for cars of not over 20 H. P. It is admitted that sound engineering favors the use of four cylinders for higher powers.

#### The Visiting Bore

There is a certain class of man who always has time to engage in a gossip with business acquaintances, and nothing delights him so much as talking to an editor. Some of these people have staying qualities that would make them rich if their abilities were only devoted to useful purposes. While the writer was suffering from a visit of the gossiping bore he uncovered a panel bearing the inscription: "He who takes the time of an editor robs him of sleep." The man read the words, laughed heartily and remained half an hour longer.

There is an etiquette of visiting business men that every sensible person adheres to. Visit business men in business hours only, make known your business in as few words as possible and then go about your business. Always let your dealing with a stranger be most carefully considered. Leave tricks of trade to those whose education was never completed. Treat all with respect, confide in few and wrong no man. Be never afraid to say "No;" and be always prompt to acknowledge and rectify a wrong. Because a friend is polite do not think his time is valueless. The way to get credit is to be punctual; the way to preserve it is not to use it much. Settle often; have short accounts. Trust not too much to appearances. Rogues generally dress a shade or more better than well.





### From Providence to Boston

Motoring is both "good and plenty" in eastern Massachusetts and the 45-miles stretch between Boston and Providence is a busy thoroughfare. The map here shown is the fifth and last section of the official A. M. L. route between New York and Boston via Narragansett Pier. The best routes are shown by heavy lines. Other important routes are shown by lighter lines.

From Providence (only  $4\frac{1}{2}$  miles below Pawtucket) the route may be described as follows:

Leaving City Hall go northward on Francis street to Gaspee street; follow Gaspee street to Smith street; cross Smith street bridge; turn left and follow Ormsbee avenue to terminus; then swing right into Charles street which follow to Randall Square and follow trolley up Randall Square to North Main street into which bear left and follow double trolley line to point beyond city line. On reaching drinking fountain (forks) turn right and follow trolley to end of avenue; then turn left with trolley and go directly along East avenue, crossing Pawtucket avenue down long steep hill to Main street square, Pawtucket ( $4\frac{1}{2}$  miles.)

On reaching Square bear right on Main street, following trolley across bridge and into Broadway. On reaching forks, keep to the left, going up hill, and again at forks (flag pole) bear left and go straight along Broadway, following trolley across railroad bridge and State line. Continue with trolley beyond State line till tracks turn right; leave trolley here and continue straight ahead on State road to North Attleboro ( $12\frac{1}{2}$  miles from Providence).

From North Attleboro the route follows trolley direct to and through Plainville ( $14\frac{1}{2}$  miles) to Wrentham (19 miles). Here leave trolley and turn to State road direct north to Walpole ( $25\frac{3}{4}$  miles).

From Walpole the route again follows trolley line direct to Norwood ( $30\frac{1}{4}$  miles) and for a distance of about three miles beyond Norwood where trolley bears to the right. Here take narrow left fork and go via Court street direct to Dedham ( $34\frac{1}{4}$  miles).

Leaving Dedham go north on Ames street; bear left across Charles River; take right fork (Bridge street) to Vine Rock Bridge; cross bridge and follow Spring street under R. R. turning left into Center street past Parker Memorial Church. At abandoned church  $\frac{1}{2}$  mile beyond, proceed straight uphill, following Center street to and beyond Arnold Arboretum (on right) to Park system which entirely surrounds Boston. Turn left, following the Parkway to Jamaica Pond which may be passed on either side. Follow the Parkway called "Jamaicaway" and "Riverway" (at different points) to the "Fen-



way." Here turn right and continue along the Fenway bearing left to the intersection of either Boylston street, Commonwealth avenue or Beacon street, all of which run in nearly parallel directions toward the northeast. Turn sharply to the right into one of these streets and continue direct to the Public Garden (Common) or State House (45 miles).

There are several other routes, all good, by which Boston may be entered from the southward and these are indicated by the map. The A. M. L. is preparing a separate map showing Boston exits and entrances on a larger scale, and still other maps showing the routes from Boston in various directions toward the east, north and west.

All the A. M. L. maps will be printed in road books for free distribution among A. M. L. members. Further particulars will be sent to any inquirer who addresses American Motor League, Vanderbilt Building, New York.

National Cash Register Co., of Dayton, and has been purchasing agent for the Oldsmobile Motor Works for some time past. J. J. Brady was with the Oldsmobile Co. for seven years, handling all their shipping and occupying the position of traffic manager. R. D. Chapin was the first and only sales-manager of the Oldsmobile Co. up to the time of his resignation, March 1st of this year. He has covered the entire country and knows the automobile trade of every State in the Union. Mr. Chapin is well posted on the making of automobiles, as he started in the business and has worked some time on them in every stage of construction. It is quite probable that no company ever started had better chances of success. The new company has been making preparations for some time, and knowing the difficulty of getting out goods after once starting to make them, has already caught a good many of the things which cause delay.

machines will be ready for the market early in the fall. The company has temporary offices at 919, 920 and 921 Majestic Building, Detroit. Business will be handled from there until the remodeling of the offices at the factory has been accomplished. Dealers who have had an inkling of the details of the car have already sent in inquiries, and there is promise of a large demand.

#### Coquelin Cadet on the Chauffeur

At a dinner of the Automobile Club of France, Coquelin Cadet, an eminent litterateur, speaking about the type of Parisian chauffeur, said:

"What about that recently invented nuisance of yours, the 'chauffeur?' Mon Dieu! What a hybrid, untamed, unconquerable, inconstant animal! They have improved, perfected the automobile, not the chauffeur. To keep a chauffeur in Paris you must be a multi-millionaire. The chauffeur has a terrible appetite. He consumes ten times more gasoline and oil and tires than the car itself.

"He always knows everything better than you. He obliges you to buy the machine you don't care for, to take the road you don't like, to stop when you don't want to. And don't you ever protest, for the sake of your life, for he will quickly drain your bank account with his repair bills, or crash your car against a bridge parapet and throw you into the middle of the river, or elope with your wife."

#### The Dreadful Crime of Kissing

For kissing a stranger in a moment of exuberance an 18-year-old waitress at Tetschen has been sentenced to fourteen days' imprisonment. The offence took place at the railway station two nights ago, and the injured man complained at once to the police and the girl was arrested. So impressed was the Magistrate with the heinousness of the crime that he increased the severity of the sentence by ordering the girl four fast days in the fortnight, and also directed that after completing the sentence she should be banished from Bohemia and sent to her home in Dresden.—Prague Letter to the London Pall Mall Gazette.

More and more the motorists are using gasoline purchased by the barrel, and they have found difficulty in storing the dangerous fluid. The American Steel Barrel Company, of Brooklyn, is at present circularizing the trade for their barrels, one of 53¼ gallons capacity and one for 110 gallons. The former lists at \$30 and the latter at \$40. In these barrels the filler, vent tube and pump attachments are thirty-six inches long, permitting the barrel to be buried underground to that depth. This method provides safety.



KING ALFONSO SALUTING PRINCESS ENA AS SHE LEFT WINCHESTER

#### New Thomas Enterprise

The E. R. Thomas Detroit Co. has been incorporated for \$300,000. The car to be manufactured by this company will be known as the "Thomas," fitting in nicely with the present line of Thomas flyers. It will be handled by the Thomas agent for 1907. Particulars regarding the new car are promised within the near future. The officers of the new company are: E. R. Thomas, president; H. E. Coffin, first vice-president; J. J. Brady, second vice-president; R. D. Chapin, treasurer and general manager; F. O. Benza, secretary.

Mr. Coffin constructed an automobile while yet in college, eight or ten years ago, and has been a close student ever since. The new two and four-cylinder Oldsmobiles are his latest production, and the success of these is ample evidence of his ability. F. O. Benza gained his early business experience with the

Detroit has been selected as a logical point at which to launch the new enterprise, as all the organizers are well known there, and the city has many natural advantages in the way of quick delivery, excellent shipping facilities by rail and water, and an established and world-wide reputation as the home of the first-quality motor cars. The connection of Mr. E. R. Thomas, the well-known manager of the Thomas car, with the new concern—and Mr. Thomas is heavily interested in a financial way—and the fact that the E. R. Thomas Motor Co. of Buffalo will handle the output for 1907, will cause general surprise.

The new car has been designed by Mr. Coffin, a bright and clever young automobile engineer. A large factory has been secured in Detroit, and the new company will begin operations at once. Contracts for some of the parts have already been placed, and the new

# Events of the Month

By F. Ed. Spooner

There have been many interesting events during the month and there are more to come during the present month. Those who plan to take part in all events are compelled to keep a diary and to do some extensive planning to arrange their business affairs so that they may get away.

At least this has been the case up to the present time, but vacation times are now before the overworked members of the automobile fraternity and they are making active preparations to devote the coming two months to pleasure. Mixed with this pleasure will be quite a little business or chance for business, as more cars benefit in these events than otherwise. The drivers of the cars and their occupants always benefit, returning to their vocations with bronzed faces and renewed vigor to again take up the battle of wits.

## The Past Month

During the month just closing we have had the Outdoor Automobile Show, the Second Annual Orphans Day parade, the Worcester Hill climb up Dead Horse Hill, the parade of the Long Island Automobile Club and many other minor events to attract interest. The Annual Economy Run of the Long Island Automobile Club has also been contested. In August we have the Second Annual Economy Contest of the New York Motor Club and following that the Third Annual A. A. A. tour.

## The Coming Month

For the coming month those who motor will compete in touring events and get out into the country. Later on the interest will center around our Coast resorts, Asbury Park, where an auto show and Economy run will be held in August, and at Cape May and Atlantic City, where more beach races will be held. In September the Vanderbilt and other road races will be held. In November those who feel inclined to travel will find their opportunity in the Jamaica Island tour being engineered by Chester I. Campbell. Following this event come the shows and then the Southern trip once more.

## New York Sets the Pace for the Whole Country

There is a strong probability that New York's many successes will bring about many events of like nature all over the country, for New York and the East sets the pace for the entire country.

## The Outdoor Show

The Outdoor Show at the Empire Track, while not the expected success,

was a money maker and as a demonstration of the possibilities of such events in the future, was first class in every way. Every great event held annually to-day, drew comparatively little interest at the outset. As a result of the efforts of the New York tradesmen, it seems altogether likely that the future will see a great automobile show of national importance, held out of doors. The Fall is the proper time for such an event, for it will be possible then to show 1907 models. The show at the Empire brought forth nothing that people had not seen again and again all up and down automobile row. Had the promoters put on more competitive events, or had they induced Walter Christie to drive his great car for records every day, the event would have drawn. The great mile record trial of Mr. Christie when he tied the long standing record of Barney Oldfield, a world's record, will not be forgotten for some time. Mr. Christie did :53, a record which coupled with his wonderful beach record places him in the premier position among American drivers.

## Orphans' Day

The Orphans' Day parade of 1906 was a wonderfully successful event. Over twice as many cars were offered and 140 participated, carrying over 1,200 children. W. J. Morgan wanted 500 cars to carry 5,000 children and although this year's response was not up to expectations Mr. Morgan will again proffer his service to promote the 1907 event, when he promises every orphan in New York a grand treat. General Cutting, Commander of the Old Guards, was marshal of the event. The General gained an insight this year and will next year take a more active part and compel the participants to run by rule. The General in his Oldsmobile, Tom Cooper in the big Matheson and others in official cars, by forming a blockading squadron across Coney Island Boulevard, stopped a dangerous stampede, which might have brought disasters without number to the poor youngsters. Dreamland opened its gates as usual and George Kessler fed the army of youngsters, the drivers and the pressmen. Al Comacho, Messrs. Schreyer, Howell, Smith, Tucker, Brill, Wagner, Reeves, with many others gave their day to the orphans. Of course it rained before the day was over, but that is expected when an automobile parade is held in New York. So general has been the rain whenever parades have been proposed that the Automobile Club of America gave up its parade this year, having been rained on for two

successive years. The Two Gallon Test of the A. C. A., let it be noted, brought a deluge.

All parades, however, do not bring rain, for the Long Island Automobile Club held theirs lately without getting a ducking.

## End of Percy Megargle's Transcontinental Tour

The arrival of Percy Megargle and David Fassett from their double Transcontinental record breaking tour, continuing nearly ten months, was a feature. These intrepid tourists left New York last August, reached the Coast in their Reo in November, after terrible hardships, and at once started back. The outward journey was made via Portland and from San Francisco and they returned via the Southern route. Some of the hardships of the trip may be learned through their plans to reach New York going so far wrong that they did not arrive until almost six months later.

## Deadhorse Hill Climb

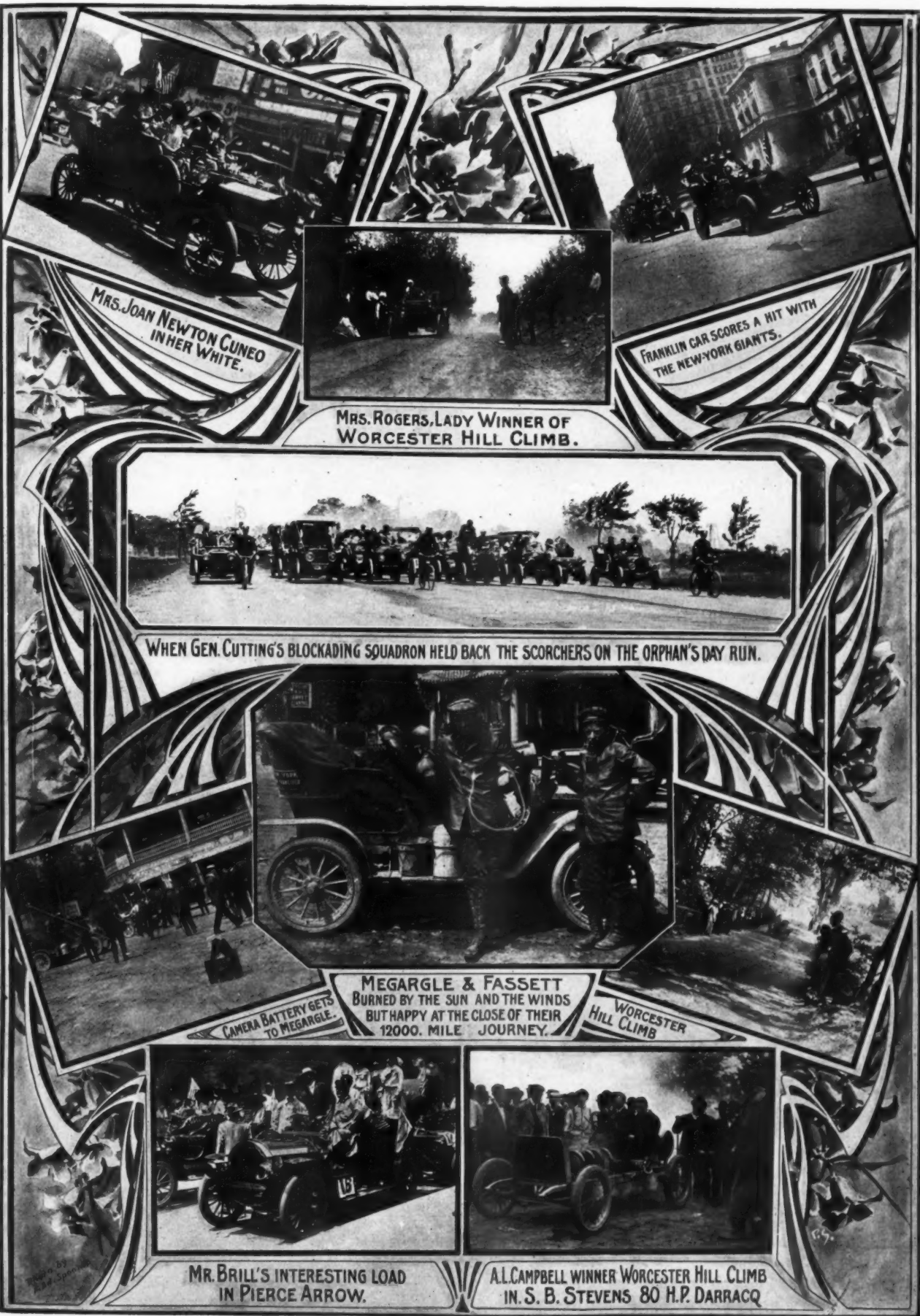
As indicating the real interest of amateur drivers and also makers in contests of any sort, the record breaking entry list of 125 at the Deadhorse Hill climb at Worcester is evidence. The list of competitors included amateurs of both sexes, tradesmen and professional drivers. Among the lady drivers Mrs. H. E. Rogers, a granddaughter by marriage of H. H. Rogers, was a prominent winner, driving a Maxwell. The star performer of the meet was A. L. Campbell in the Darracq Vanderbilt race winner, who drove for S. B. Stevens. Last year Mr. Stevens with that always unlucky 90 H. P. Mercedes car imported into this country by C. Gray Dinsmore, placed the record for the hill at 1:09 and this year he brings it down eight seconds.

## That Ill-Fated Mercedes Car

The Mercedes car formerly the property of Mr. Dinsmore and later of Mr. Stevens, and now owned by J. H. Harding, burned at the Readville Meet, May 30. Joe Downey was its last driver. Twice entered in Vanderbilt races it always went wrong and at Ormond this year it held to the hoodoo. Mr. Dinsmore always claimed that the car was unlucky, as he had never won with it, and he was right.

One of the amusing incidents of the month was the purchase of an unlicensed Mercedes car by Thomas F. Ryan, the famous capitalist, who holds large interests in the Seidon patent. Mr. Ryan called upon Manager De Wirt at the salesrooms of the Mercedes car, and after examining a car that suited his fancy said he supposed the car was licensed.







Mr. De Wirt assured the stranger very emphatically that it was not licensed and took occasion to disclaim strongly against the Seldon patent and its friends. Ryan laughed heartily, but returned next day and bought the car and had it shipped for Europe for the use of the purchaser, who is now touring on the continent.

A tempest in a teapot raged in St. Louis last month through Street Commissioner Valliant having put in a requisition for two automobiles. It gave opportunity for some of the beautiful spread-eagle talk about restraining unnecessary expenses and conserving the liberties of the people. A pair of automobiles were considered a dangerous innovation and a bad example to the poor citizens who have to hoof it through the dust and mire of St. Louis thoroughfares.

### The Milan Gold Cup Race

From an international standpoint the most important and interesting event of the month was the great Italian Touring Contest or the Milan gold cup race, which proved a very severe endurance run. About fifty of the most celebrated professional drivers entered with the most famous automobiles in Europe.

This contest started on May 14 and continued for eleven days, the total distance covered being 2,671 miles. The average daily run was 250 miles, the longest being 291 miles. The difficulties and severity of the course can be realized from the fact that the circuit crossed the Appenines several times, and also the Alps of Cadore. At times the altitude was 4,200 feet. During the fourth day it rained and hailed for several hours, and the roads, during a great part of the distance, were in a miserable condition.

Considering all these facts, the record of the Fiat team is wonderful. Lancia in a 35-horsepower Fiat completed the 2,671 miles without being penalized a single second, and the other members of the Fiat team, Nazzaro and Boschis, were penalized only 35 seconds and 87 seconds respectively. Of the forty-five cars which started, only sixteen finished, three of which were Fiats.

Of the prizes, which were \$30,000 in cash and a large number of cups, Lancia receives the great gold cup and \$5,000 in cash, and the Fiat team wins the prize for the best team work, and nine additional cups for special work. Their wonderful victory in this endurance run will make them the favorite team at the Grand Prix, which takes place in a few weeks. Lancia is second starter in this great event, and now that his spell of hard luck has been broken, he is picked as the winner, and barring accidents, should add this race to his credit.

## Judge Dill's Enthusiasm on Third Annual A. A. A. Tour

By F. Ed. Spooner

Judge James B. Dill is most enthusiastic regarding the Third Annual Tour of the American Automobile Association. The Judge is a Maine enthusiast, having devoted all of his spare time to exploration in an ideal touring country.

### Pioneer Automobilist

Judge Dill, it must be remembered, was the pioneer automobile tourist in this section. He traveled by auto through the Maine woods when gasoline was an unknown commodity, and at a time when automobiles were "devil wagons" and not to be approached by the inhabitants. Not a native would volunteer information regarding the roads to Judge Dill when he made his initial tour, and finally he appealed to a

himself and he has photo records of his many trips to show the visitor.

### Wonderful Memory for Details

For many hours law matters were laid to one side by this wonderful man. Mere matters of law at upwards of \$1,000 an hour paled into insignificance as compared to touring in an automobile.

For hours the Judge walked the floor; for hours he delved into recesses of many hidden closets to find route books and photos to illustrate his points. His evident enthusiasm was catching and it was not long before the writer entirely forgot inequalities of rank and incidentally wealth, and joined heartily in search for hidden truths regarding the great route of the 1906 tour of the A. A. A.

### Met on Common Ground

Having entered the palatial home of Judge Dill with the idea that many hidden secrets would be revealed regarding the route and its tough side, the writer was converted very quickly. With interests in common the conversation ran along for hours. Both Judge Dill and the writer met on a common ground as regards tours. Both agreed that the ideal tour was one which led to discovery. Unknown rather than known routes were, in the opinion of both, proper for a tour, and proper also for a real test of car and driver. This unanimity of opinion brought many an interesting anecdote from Judge Dill, the pioneer over this route.

### First Experience of Route—Priest Exorcises the Devils

"When I first essayed the journey from New York via Lake Champlain, Montreal and Quebec," said the Judge, "I was completely lost. You could not secure a guide, for the natives held aloof. They would not come within, say, six yards of the machine. Finally I found a reverend father, and he said that 'The Church was afraid of nothing in this world or the next,' and I placed \$5 in the box. The father brought the holy water and thoroughly doused my machine. He exorcised the devils and promised to show me five miles. At the completion of five he consented to go farther, and I carried him over twenty miles. In each hamlet, marked by a truly magnificent cathedral and a lot of houses hardly large enough for dog kennels, the father grew very enthusiastic regarding my 'devil wagon,' and he assured the natives that he had 'exorcised all the devils.'"

### Splendid Roads and No Dust

The Judge gave some details in regard to the entire route from Saratoga to Bretton Woods, and, after telling at length of the truly grand scenery and



JUDGE JAMES B. DILL

priest. The reverend father when asked to show the road said, "The Church is afraid of nothing in this world or the next," and he showed the way for mile after mile.

I interviewed Judge Dill at his home. The Judge was found in his great law library, containing thousands and thousands of volumes. His home, at 83 Harrison street, East Orange, is a beautiful castle, and Judge Dill, when the writer called, had just completed his work for the evening. He had prepared for the visit of the writer and piled on his desk was a group of route books truly inspiring. Every book ever published regarding the Canada-Maine route was there, and with the route books there were pictures by the hundred showing the delights of Maine touring. The Judge is considerable of a photographer

the splendid roads, he grew enthusiastic. "Why, on this route there is no dust," said Judge Dill. "You see, the heavy dews at night lay the dust, and were the roads correctly sprinkled they could not be more ideal for touring. And again you must bear in mind that from a point about 29 miles from Montreal until the destination, rivers are followed all the way. Someone asked me in regard to securing water. Why, the man with a rubber pail may secure that anywhere. As regards eating, the tourists will enjoy venison, native ham, trout, etc., but no beef. They will be fed with good, substantial food at ridiculously low prices, and their beds will be most comfortable and with lots of room to spare all around them."

#### Entire Route Ideal

Generally speaking, Judge Dill says: "This entire route is ideal. I shall advise all my friends who operate gasoline engines to gear low; for there are real hills to be encountered carrying the tourists to the clouds. The route is diversified and the tour from start to finish will prove an ideal contest for both the driver and his car."

Judge Dill was a member of the path-finding party which so surreptitiously departed from New York to cover the route. The Judge joined the party in

route there will be found danger spots for the scorcher, and caution will be the rule with the wise ones. Ideal roads will lead to scorching, but may also lead to deaths, as turns are sharp and very sudden, and the road leads along the face of high cliffs with no guard rails whatsoever."

essity of securing the driver's and also the car's license for Canada, an expense of \$10, and of securing also the necessary Customs papers to allow the ingress of the car into Canada and its egress.

Jules Hone, of the Canadian Pacific Railroad, Quebec, has promised to aid



ROAD TO CHAZY, N. Y., MAKING READY FOR THE GLIDDEN TOURIST



ROAD TO MONTREAL ALONG THE CHAMBLY RIVER

Canada and escorted them to Rangely Lakes.

#### Good Night Accommodation Everywhere

Incidentally, Judge Dill set at rest all the reports in regard to sleeping in tents one night and log cabins the next. "Beyond a little trouble at Three Rivers," said the Judge, "the tourists will always find good accommodations at every starting point. The canard regarding roads compelling a clearing of the right of way was set at rest. Along the

#### Easy Route for Careful Drivers

The Judge can see no reason why the most timid driver cannot make the trip, and he believes that it will be the incautious driver who will get into trouble. For a careful driver there can be no trouble. Some portions of the road are narrow and passing is out of the question, but passing is not always necessary.

#### Obtain Licenses for Canada

The Judge calls attention to the nec-

the tourists and will do so. He will secure papers of any sort, and the C. P. R. will check the baggage and do all in its power to aid the tourists.

Judge Dill's description of the road from Saratoga is very interesting. He says:

#### From Buffalo to Montreal

"From Buffalo through Auburn and Utica to Saratoga the roads are new, as a rule, to tourists, and of the customary New York variety. From Saratoga, where our first Sunday is spent, to Fort William Henry Hotel there are good, wide dirt roads and not dusty. The route carries us to Elizabethtown for the night's stop, a trip of one hundred miles. In this one hundred miles there are some gradual rises after leaving Lake George. After leaving Fort William Henry Hotel the tourists will find about twenty miles of trying footing. The ascents are continuous. The turns are angular and the roadway is wide enough for but one machine. Passing is out of the question. There is one  $3\frac{1}{4}$  mile hill in this stretch which averages, say, ten per cent. The next day's run is short, only 35 miles from Elizabethtown to the Lake Champlain Hotel. On the succeeding day, Wednesday, July 18, the run is to Montreal. To Rouse's Point the roads are fair country roads, level to rolling.

There are no heavy hills. The tourists pass through Plattsburg, where is found the Lozier factory, a good garage and hotel.



**Preliminaries for Entering Canada**

At Rouse's Point it will be necessary to prepare, not so much for the entry into Canada, but for the exit at Jackman later on. It will be necessary to secure an outgoing lading bill, describing the car by number, color, make, etc. This will have to be presented to the U. S. Custom House at Jackman, where

The Riding Club has converted its place into a garage accommodating 150 cars. In leaving Quebec the St. Lawrence river must be crossed. A curious little ferry boat, in reality a sea going tug, draws up to the pier and not over six average sized cars may be loaded on at one time. It will be necessary to start taking the cars over early.

composed of insignificant houses hardly larger than dog kennels and a truly magnificent cathedral are found. One wonders how people who are able to build houses no larger than these could ever raise funds to build such great churches. The route is marked by the cathedral spires. He will make friends who leaves a few pennies at each shrine. Too much cannot be said about the scenic beauty of this route and the roads are a constant source of delight. The region is given over to hunting and fishing yet, and the hotels seen are small and clean. No such 70 miles of scenic road can be found elsewhere in America, and to take this long journey for this 70 mile trip would be time well spent. From Jersey Mills the road leads up the valley of the River Deloupe with a gradual ascent to the clouds. Where there are good grades one may obtain a good run for it. St. Clume is at the peak of the mountains. After leaving the top the road gradually descends, but for a ways follows the course of the river 150 feet above it. It finally reaches the level. Line Hill is reached at 97 miles on this day's novel journey.

**In Maine**

This point is the granite ribbed boundary between Canada and the United States. The road leads for fourteen



ROAD TO THE LINE HOUSE, CANADA

it will be vised for \$1. Superintendent Tucker will arrange all these matters as soon as the entries are closed. Those who endeavor to make the tour without an entry either as a contestant or non-contestant, will be left in the running. Their progress will be checked here by red tape.

After leaving Rouse's Point there is a straight, level road up the bank of the Richelieu river to Chambly, where is found an automobile club. At Chambly the road swings west in a straight line to and over the Victoria bridge, the finest bridge in the world. This bridge is nearly four miles long and five or six autos may cross abreast.

**From Montreal to Quebec**

From Montreal, where an extra day is given for sightseeing, to Quebec, where Sunday and Monday are spent, the route lies through Three Rivers, a Canadian watering place. The steamboat will be anchored here as a floating hotel. The roads from Montreal to Quebec are but average roads. They are clay largely, and if rained on slightly will be slippery, and should four or five days of rain occur these roads will be hub deep. Approaching Quebec there are many steep rises going up at times to 15 per cent. These hills have been paved zigzag and will have to be taken by tacking. The paving is Belgian block. In Quebec the tourists will find sufficient sightseeing to take all of three days or 2½ days, which will be spent there.



ROAD TO JACKMAN, ME.

**Quebec Back to the Stars and Stripes**

From Quebec to St. Henri, the roads are fair macadam and from there to Scott's Junction, 17 miles, the scenery is magnificent. This is in the Chaudiere Valley. It is the picture trip of Quebec motorists. The road follows the river, and, in fact, from this time on the roads follow the rivers for days and days. It is first one river and then another. All along the route from Quebec to Jackman only French is spoken. The entire 112 miles is beautiful. Frequent towns

miles into the United States before the Custom House is reached at Jackman. The sleepy customs officer must be sought out oftentimes, but he must be found, for they can follow you anywhere and catch you. There is a fair hotel here.

**Town of One House**

Out of Jackman after crossing the Canadian Pacific Railway there is a steady rise for six miles, an ascent of over 1,000 feet. Twelve miles out is a town, Parlious Pond, with just one house,



and to this point the road has been through deep woods and only three houses have been passed. In these woods may be seen deer, bear and lots of other game, yet the road is ideal. The drop from Parlius Pond is from the clouds to the Forks, a union of two rivers making up the Kennebec, a mad, rushing torrent along which the tourists travel over ideal going. The Kennebec is a lumber-carrying stream and the roadway has been dug out of the bank. The footing is really magnificent and it is level, the road running 100 feet above the river. The turns are bad and are concealed. It is possible to see hardly 300 feet ahead. Someone will get hurt here, and in event of a collision the cars and their occupants will go into the mad torrent below.

#### Back into Civilization

Past this point which will be labeled dangerous, the tourists enter civilization with towns following each other regularly and roads that are roads. Waterville

fine fun. There is fishing here and the scenery is grand beyond compare.

#### Nearing the Finish

From Rangeley we cross the mountains to the valley of the Androscoggin river, thence down an eighteen mile grade to Phillips, and then to Webb. The roads continue grand through Dixfield, Rumford Falls, and thence along the Androscoggin river to Shelburne, on the east bank.

From Rumford Falls on, Mt. Washington may be seen. At Gorham the Androscoggin is crossed and the valley is followed for twenty miles to Bretton Woods, all in all, an ideal tour.

#### Arresting the Wrong Man

One New York policeman who arrested a prominent New York business man of wealth caught a Tartar, and before he finished with the job he found himself riding a bicycle out in the suburbs of Brooklyn about as far from Jerome

resilient, or spring wheels, shod with solid tires, are to the effect that the results were disappointing. The wheels competing were designed to do away with the use of pneumatic tires on commercial motor vehicles, but their showing appears to be a substantial vindication of the pneumatic. The test extended over eight days, the course being from Paris to Nice and return, 1,338 miles. Of the ten cars that started, only three finished. The Soleil, Edmund Levy and Garchey devices were the three to finish. According to the rules of the competition, no award was to be made if an average speed of 18.6 miles per hour for the entire trial—1,338 miles—was passed. The three cars which finished went faster than the average; the car with the Soleil wheels averaging 19.1 miles an hour; the car with the Edmund Levy wheels, 23.3 miles an hour and the one with the Garchey wheels 25.3 miles an hour.



RANGELEY FROM THE RESERVOIR

Copyright 1906, Sawyer, Farmington, Me.

is on the point of the V and on our next day's trip we retrace our route, as it were, to Rangeley Lakes, from which we had been but thirty-six miles as a crow flies the day previous. Yet we travel 162 miles to reach there.

#### Scene of Benedict Arnold's Famous March

The crossroads are lumber trails, obstructed purposely to stop travel, as the lumbermen fear fires were the roads used. All of this country was made famous by Benedict Arnold in his march to Quebec. The route of 81 miles from Jackman to Waterville lies through Solon, thence to Skowhegan, to Fairfield, where will be found the finest hotel in Maine and Waterville. The roads are superb. Many of the non-contesting entrants will stop at Fairfield. Leaving Waterville there are fine roads to Noridgewock, to Madison, where the river is crossed to the west side and to North Anson, North New Portland, Stratton and Rangeley Lake, 103 miles of ideal going for the day. Another vacation of a day spent here will provide

avenue in the Bronx as it was possible to go. This policeman had gained fame through taking money from some people, and certain prominent politicians, egged on by some business men, are now after him in earnest, even out in the suburbs. He will ultimately receive his walking papers. It is probably safe, therefore, to advise policemen given to arresting automobilists to first look and then leap, for some men are not easy and will not quiet down after an unjust arrest.

#### Resilient Wheels

Resilient driving wheels were used to a considerable extent on locomotives in the United States before the durable Bessemer steel rail was introduced, and they did very good service in softening the blows on the fragile iron rail. It looks as if the freight automobile was a good subject for an invention of this kind, but the few trials made with resilient wheels have not been encouraging.

Reports from France on the contest for

#### Dynamite in Freylinghuysen Law

An elucidation of the New Jersey law as it goes into effect July 1, would be interesting, providing James B. Dill could be induced to tell of all the good and bad points of this law. The Judge avers that dynamite in quantities will be found in the Freylinghuysen Bill as passed, and he believes that a very little time will serve to bring forth many of the dynamite charges, the explosion of which will ultimately react to the benefit of the automobilists.

Out in Ohio they passed a law which was so very bad that it was no law, and now Ohioans are without a law of any sort, and doing about as they please.

A somewhat novel remedy for over-speeding is proposed by Mr. C. E. Duryea. He writes us: "I believe the remedy for the speed nuisance is to prohibit horn blowing. The user of the horn expects the road to be cleared and it generally is. If he had no horn, he would be obliged to drive slowly. Try it yourself."

## Mobilettes

By F. Ed. Spooner

### Taking Part in Events

Keeping track of events nowadays in the automobile world is about as much as much as a man can do. Every day's papers tell of something more to occur. One day it is an endurance run, another day a stunt of some maker and then an economy test. Event follows event with seeming regularity, and the maker who would keep in the swim must keep a diary or get left when he is a searcher for publicity. These events add to the advertising possibility of every maker and every agent, and he is a wise man who takes part in everything. The papers are anxious to give space to every sort of test nowadays, and every car entered receives its just share of the mentions in the daily and weekly press. With a multiplicity of events it is not surprising that some overlook one occasionally and then express sorrow because they were not represented. In reality every agent should be adequately backed by his maker and then should go in for everything, for in these economy tests, these tours, and in every other sort of event, there is the best sort of advertising for the winning cars. No maker knows until he has tried just what his car will do, and competition is interesting, creating untold numbers of converts for automobilism.

### They Always Blame the Automobile

In the daily news we learn that the automobile caused all the trouble in every instance. Telegraph reports from everywhere invariably lay it to the motor car. For instance, in Suffolk, Va., a motorist came to a standstill and stopped all his machinery while a funeral procession was passing. A horse in the procession became frightened, ran into another carriage and the occupants were thrown out. Ultimately the frightened horse had about disrupted the procession and the innocent automobile received all the blame. In reality the fool who drove the horse in a funeral procession knowing that an automobile at a standstill with its machinery stopped would frighten him into a connip-tion fit, should have been blamed, but, of course, the daily papers blamed it all to the auto, as is their custom, and the motorist was given the benefit of the doubt, and, doubtless, exorcised.

### Examination of Automobile Drivers

In Paris they examine a driver very carefully to learn of his ability to drive an automobile. The Prefect of Police

sits on the front seat and carefully directs the driver, who is compelled to go through an examination which is very thorough. New Jersey aims to do the same thing, and the law compels the examination of every driver. As a matter of fact, the man in charge of the office asks questions, issues the license to drive the car without question, and that is all there is to it. Now, were every driver to be put through a number of stunts, it might be a good thing, for not a day passes that the papers do not record accidents caused by green drivers. The motorists as a rule take the blame for the entire matter and good and bad drivers alike are exorcised. Were

realizing the danger, while inexperienced men take every chance and in many cases come to grief and then bring discredit upon the general run of automobile drivers. An automobile in the hands of an experienced and careful driver is as safe at forty miles an hour as an automobile in the hands of an inexperienced man and going only one-quarter of that speed. France has discovered the correct manner of regulating the matter, and America will soon fall into line. In the meantime, it is quite probable that the daily papers will continue to record regularly accidents which should never be.

### The Automobile as a Trackless Trolley Car

The automobile as a trackless trolley is coming more generally into use. In



AUTOMOBILE STAFF OF PHOTOGRAPHERS TAKING PICTURES FOR THE JULY NUMBER

American drivers to pass through a thorough examination such as is given in France, the present stringent laws, so annoying to the good drivers, might be set to one side within a few years. In France a man receives his license only after a most thorough examination, then goes out and drives at a safe gait, and in event of doing otherwise and causing an accident loses his privilege to drive a car altogether. In proportion to the number of cars in use France leads, and there are not as many accidents in France as there are in America. In a majority of instances these unfortunate reports of accidents recorded in America come from green drivers who attempt to do those things which no sane experienced driver would ever do. Experienced men are careful at all times,

Puerto Rico, in Cuba and in the western part of the United States the automobile has provided the means to reach points hitherto without the pale of civilization with the slow-going horse. The auto takes the place of the horse, cuts the old time into quarters and in reality into eighths, and the people are placed within civilization instead of being ostracized. Down in Cuba I was struck with this fact more forcibly than I had ever been struck before. Out in the country on the beautiful road from Guanajay to Havana, the Knox auto busses rolled along the road at twenty miles an hour, filled with a merry crew, while the horse-drawn vehicles of olden times, and still in use, made about four to six miles an hour. Time is money, and the busses in use in Cuba and other Latin countries save time by hours and hours for the in-



habitants. In Cuba there was a noticeable lack of patronage in the horse-drawn stages, while the Jua Juas, as the auto busses are known, were crowded all the time. Out in Arizona and New Mexico automobiles have supplanted the stages, and the United States mail is being carried in one-quarter the time now. Yet some people will have it that the automobile is a fad, and that in ten years the people will give them up and go back to the horses. Such malcontents with improvement rank with those who in the early days of railroad trains predicted that the people would ultimately go back to stage coaches. They didn't, and they won't in motoring. The automobile has revolutionized transportation, and ultimately will enter the field as a strong opponent of the electric cars running on rails. The automobile necessitates the building of no tracks and takes the roads just as they exist without harm to the roads and much to the convenience of the people.

#### Percy Pierce Is Missed

Percy Pierce may be missed on the Glidden tour this year, the first great American tour which this popular young man has ever missed. Mr. Pierce first took part in a tour in '99, and he has won honors in every event in which he has competed since that time. In fact, he has been a feature. Last year he drove a consistent journey from start to finish of the Glidden tour, and that he won out was no surprise. When others scorched, Percy drove right along at his own gait. His mother and father and his fiancée, who accompanied him, had the time of their lives, and every inch of the journey was an enjoyment not to be described in words, to use the expression of Mr. Geo. N. Pierce. With the tourists Percy Pierce is always popular. He is witty and droll in his sayings and he talks but little at that. His absence this year will be keenly felt by all oldtimers, but everyone of those who miss him will have his welfare at heart as he battles for supremacy for the American car on the other side of the water.

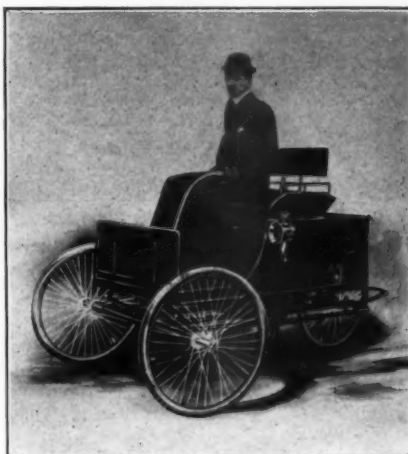
#### Pleasant Goal of the Glidden Tour

That the Glidden tour is again to close at the famous houses, the Mt. Pleasant and the Mt. Washington, is a source of gratification to every tourist who has ever journeyed to the hospitable summer homes in the sight of Mt. Washington's cloud-bedecked peak. Messrs. Anderson and Price are Mein Hosts to perfection, whether it be in the Sunny Southland, at Ormond, or in the cooler north in the shade of the ranges of the White Mountain group. The glad-hand may always be found with these gentlemen, and nothing so pleases them as a glimpse of automobiles and their occupants arriving at their famous hostleries. The great plateau between the Mt.

Pleasant and the Mt. Washington promises to be a lively spot this year, with from one to two hundred automobiles in constant action. The garages which have been constructed will hardly hold the invading hosts. The splendid roads throughout the White Mountain region, many of them constructed through the good work of John Anderson, will again be alive with the choo-choo cars, and the hospitable farmers will again welcome, as they have always done, their motoring friends.

#### Special Telegraph Operators for Glidden Tour

It is going to be necessary to carry telegraph operators along much of the route of the Glidden tour to take care of the press dispatches. Some of the route is not too thickly populated, yet the roads are good. The telegraph offices are far from adequate as regards help to care for the great mass of matter which



Three-Wheel Car, built by C. W. Kelsey, Maxwell-Briscoe Motor Car Co., in 1898, when he was a student in an engineering school. Ran 6 miles an hour and made 2,000 miles.

will be sent over the wire. And that reminds me that Charles J. Glidden is, himself, an old-time operator, and that in past tours he has acted in the old-time capacity, while aiding the press men to get out rushed copy. It was on the St. Louis trip that we men of the press first discovered that Mr. Glidden was a lightning sender. At Pontiac, Ill., a fire broke out in the garage at 2.30 in the morning. As the garage was just across from the hotel, we were all out of bed in a twinkling. There were news features to the fire and every man of the press immediately started to write. With the copy ready the press men found the little telegraph office closed, whereupon they met at the hotel and held an indignation meeting. Mr. Glidden listened to it all and then asked the writers to come with him. The windows of the telegraph office were broken open, and Charles J. Glidden, the millionaire tourist, took the key, sending through every dispatch in jig time. On last

year's run at Mt. Washington and again at the Hotel Aspenwall, at Lenox, he took his place at the key while in evening suit and sent thousands of words to aid the press men to keep faith with their papers. In both instances the local operators were totally inadequate to fulfil the duties of their position, and Mr. Glidden's aid, while surprising, was very welcome to them. Doubtless this great tourist will again be called upon this year to give a hand.

#### Sport of Gentlemen

R. F. Kelsey, sales manager of the Maxwell-Briscoe Company, has some ideas in regard to automobile competition which he has embodied in a letter to Secretary Gorham, of the A. A. A. Mr. Kelsey would like to see automobile competition of every sort put on a much higher basis than at present. He believes that the maker who enters a car as a stock car and then drives a car made especially for competition should be barred from all future competition. He believes that any car protested as not being a stock car should be placed in the hands of a special committee until passed upon. Mr. Kelsey says that every manufacturer approached in the matter believes as he does. It is the opinion of Mr. Kelsey that referees are lax in their duties, as they allow any car to run unless it is protested. He believes that the referee should find some way to get around this and that he should have men at hand capable of passing upon cars. Mr. Kelsey says that every manufacturer believes to-day that every other manufacturer is placing in competitive events a car not similar to his stock car, in other words, specially constructed, and he believes that such a feeling robs contests of countless entries which might otherwise be secured. It is the opinion of Mr. Kelsey that good sport should prevail in motoring and that every maker should be sport enough to stick to strictly stock models in stock classes. "As horse racing is the sport of kings," automobiling should be in every sense of the word "Sport of gentlemen," concludes Mr. Kelsey. In every word of which he is right.

No driver takes an automobile out of the Decauville garage unless the act is recorded in the book of the time-keeper, who is perched in an eyrie not very far from the door. A complete record is maintained on a card of every machine and the card shows the time it went out and the time it came in. In this way the owner of an automobile stored at this garage is able at all times to see what has been done with the car. The system is right, and were it adopted in every garage there would be less of the terrible accidents which are recorded as having occurred while the chauffeur had the car out without the owner knowing it.



## Of Personal Interest

At the last meeting of the Automobile Club of St. Louis, held May 24, the following officers were elected: Alexander Euston, President; E. M. Senseny, Vice-

and Mrs. George O. Forbes, of Rockford, Ill., are on a tour from their home to New York and return. They encountered some very bad roads on their long

rebuilding of the Pittsburg-Philadelphia turnpike in particular. This road, which was at one time among the finest in the country, has been allowed to get into



D. H. MORRIS  
President, Automobile Club of America,  
New York

President and Roy F. Britton, Secretary and Treasurer.

William Lewis, president of the Mitchell Motor Car Company, and superintendent Bates, of the same company, are touring in the mountainous regions



J. H. WOOD  
President, New Jersey Automobile and Motor  
Club, Newark, N. J.

journey but they reached New York with little delay, delighted with their novel experiences.

Paul C. Wolff, secretary of the Automobile Club, accompanied by H. Lee Mason, were visitors in New York last



STANFORD I. HAYNES  
President, Automobile Club, Springfield, Mass.

bad condition, and Pennsylvania motorists are anxious that it be reconstructed.

The Blair County Automobile Club, whose headquarters is in Altoona, Pa., is a very active organization. At a recent meeting, presided over by Presi-



EDW. S. GEORGE  
President, Automobile Club of Detroit

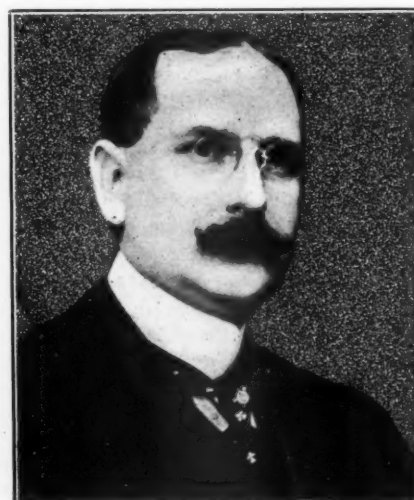
of the Pacific Coast, for the purpose of finding out the kind of car best adapted to the severe strains met with in motoring over hilly roads.

Mr. and Mrs. Wait Talcott, and Mr.



ALFRED WILMARTH  
President, Automobile Club of Long Island

month, having made the trip in a Stevens Duryea car. Mr. Wolff is secretary of the Pennsylvania Motor Federation, and while in the East conferred with prominent automobilists there regarding good roads in general, and the



COL. F. M. JOYCE  
President, Automobile Club of Minneapolis

dent Dr. O. H. Shaffer, the constitution and by-laws were revised. A board of governors was chosen as follows: Dr. G. F. Tate, J. E. Shute, George Epplenman and W. W. Blake, all of Altoona, for two years, and J. D. Hartman, of

Hollidaysburg, Dr. W. M. Eldon, of Roaring Spring, and Levi Kantner, of Altoona.

The officers of the Bloomington, Ill., Automobile Club are: President, S. P.

an automobile all by himself, and it not only makes a good appearance, but runs about the town like the liveliest of runabouts. The boy is very handy with tools. He made the wheels from old

Mr. Thomas says: "This Vanderbilt race is the automobile classic. It should be America against the world."

Charles M. Schwab, the noted steel



H. A. BONNELL  
Secretary, N. J. Automobile and Motor Club,  
Newark, N. J.



R. J. SMITH  
Secretary, Automobile Club of  
Minneapolis



D. H. LEWIS  
Secretary, Buffalo Automobile  
Club

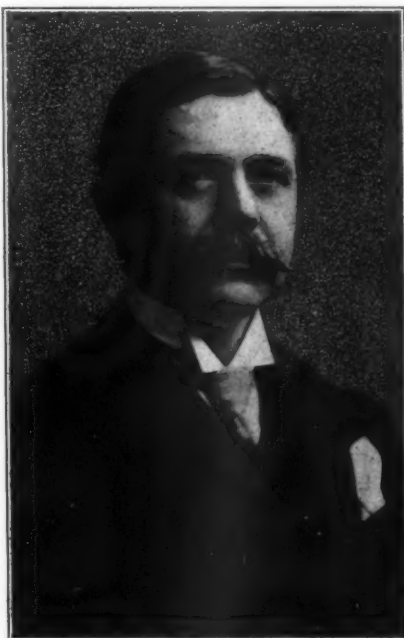
Irwin; vice-president, W. E. Johnston, of Arrowsmith; secretary, Henry Thobro; treasurer, Charles W. Diets; directors, W. K. Bracken, Walter H. Johnson, John A. Beck, O. R. Skinner and

bicycle wheels, built a box, bought a 2½ H. P. gasoline engine for \$50, installed it, and estimates that, when every cost is taken into consideration, the machine has cost him no more than \$120.

magnate, who is also an enthusiastic automobilist, is mentioned as a candidate for United States Senator for Nevada. After the awful scandalous United States Senators purchas-



J. WALTER NORCROSS  
Secretary, Springfield Auto Club,  
Springfield, Mass.



J. P. MOODIE  
President, Automobile Club of  
Hamilton, Ont.



JOHN W. GORDON  
Secretary, Automobile Club of  
Vermont

George M. Green; road captain, Guy Carlton; assistant, A. C. Carnahan.

Jerry Myers, a 15-year-old boy of North Berwick, Pa., has just completed

E. R. Thomas, maker of the famous automobile which bears his name, is a genuine sportsman. He is having three racing cars built to take part in the Vanderbilt race. Regarding that race,

ing their seats and working exclusively for their own personal interests, it would be a grim comment upon the influence of popular agitation against the tyranny of trusts, to see Mr. Schwab,

who represents the Steel Trust, which has heaped up dividends by scandalous tariff protection, take a seat in the United States Senate, where no doubt he would do his best to perpetuate the high duty on imported steel.

A meeting of the Winnipeg Auto Club was held last month. Those present were: J. C. G. Armytage, president; J. Maw, W. C. Powers, J. K. McCulloch, Geo. Carruthers and A. Emmet, secretary. The following new members were reported as having sent in their subscriptions: W. F. Alloway, A. A. Andrews and G. Miller. Mr. Jos. Maw then proposed the names of Messrs. Golding, Belcher, H. W. Mitchell and J. Thompson as new members. The proposal was seconded by J. K. McCulloch, and they were declared duly elected.

At the annual election of the Austin (Ill.) Automobile Club, James E. Plew, proprietor of a large automobile garage in Chicago, was elected president. The others are: First vice-president, A. B. Stratton; second vice-president, J. W. Cremin; directors, H. A. Wilke, W. H. Eckhart, G. B. Coffin and T. J. Peterson. The Oaks Club is an up-to-date social organization and is said to have increased its roll of membership with wonderful rapidity during the last year.

F. J. Alvin, general manager of the American Electric and Novelty Manufacturing Company, is well known to every man who entered automobiling from bicycle circles, for Mr. Alvin was general manager in the old days of the Excelsior Supply Company, of Chicago, and other places, and general salesman for the Thistle Bicycle Company. In the automobile field Mr. Alvin has disposed of enough carloads of Ever Ready batteries to make a train from the Golden Gate to Hell Gate without a break and the Ever Ready starter has created such a hit in Europe that America has seen none of them or few of them this year. They are to go to American consumers at an early date. Mr. Alvin has a stupendous surprise to spring upon the automobile fraternity within a very short time.

Welton Flinn, the young man of gray hairs and portly form, who has taken charge of the insurance department of the American Automobile Association, is an old-time Detroit ice cream manufacturer, who graduated into the cycle business in Chicago and thence came to New York, taking up life insurance. The work pleased him and he has made a distinct success. At present he does most of the insuring in the automobile district. His work in the A. A. A. is a sinecure, and will add one more valuable department to the A. A. A.

Mr. H. A. Lozier, Jr., president of the Lozier Motor Company, sailed for Eu-

rope on the "Baltic" on Wednesday, to make a tour of Europe with a Lozier 40 H. P. car. The Lozier Motor Company pride themselves on building an all-American car, and it is the object of Mr. Lozier's trip to give the foreign trade a chance to see what constitutes American ideals of motor car construction.

Dr. F. A. Cook will endeavor to reach the South Pole in an automobile. He has perfected an autocar that will travel on ice. This machine is said to be fitted with a friction belt running over the wheels from front to rear and so



WALTER WHITE  
White Sewing Machine Co.

providing traction as it runs along the ice. The H. H. Franklin Manufacturing Company will supply the engines for the machine, it is said.

Harry Wheeler, a man of world-wide reputation away back in the early nineties in cycling days, and a man whose earnings were equal to the President's salary year after year, now seeks an opening in the automobile trade. In his search for a position, Mr. Wheeler took a place with E. B. Gallagher, in charge of the garage at night, and he had been

in the place but a day when the washers and other men on the floor were discharged and he was informed that he would be required to spend his nights washing up the cars. The indignity brought a resignation at once.

Hiram Percy Maxim, who is now mechanical engineer for the Electric Vehicle Company, has been exceedingly successful in winning automobile races, although he rarely enters such contests. At Readville on Decoration Day he won the ten mile handicap in a Columbia car. He won the first regularly organized automobile race held on a track in this country. This was at a fair in Branford, Conn., in 1898. The race was for five miles and Mr. Maxim drove one of the early Columbia gasoline models, a two cylinder water cooled machine of fairly able accomplishments in its day. His time was something like 12 minutes. There were six contestants. Since 1898 Mr. Maxim has been almost uniformly successful in the comparatively few races and hill climbing contests in which he has entered. He is a son of Sir Hiram Maxim, the noted inventor.

At the recent meeting of the Hartford Automobile Club, J. Howard Morse was re-elected president. Other officers were chosen as follows: Vice-president, F. C. Billings; secretary, G. B. Dustin; treasurer, R. B. Belden; chairmen committees—membership, L. C. Grover; runs and tours, George Beach; racing, George E. Sykes; good roads, J. M. Birmingham; amusement, A. L. Hills; rights and privileges, R. M. Goodrich. Several new members were elected and the report of the treasurer showed a balance of over \$300 in the club treasury.

#### Rapid Growth of Buffalo Automobile Club

The Automobile Club of Buffalo is growing rapidly. At a meeting of the membership committee held on Friday afternoon, twenty-six applications were favorably received as follows:

Lowell C. Frost, Arthur G. Redlein, Chas. Weston, John F. Kloop, R. W. Bayliss, Chas. S. Jewett, R. J. McKee, John H. Kamman, C. F. Bingham, J. G. Lang, Philip Bartholomay, George Schaaf, Clifford R. Orr, C. L. Rollins, A. C. Goodyear, C. V. Brunner, James E. Johnson, Alfonso Karl, R. T. Callahan, Wm. H. Bell, Henry C. Jordan, James D. Warren all of Buffalo, and Eli Toy, Kensington, N. Y., L. S. DeGraff, North Tonawanda, N. Y., E. B. Freeman, Middleport, N. Y., R. H. Losey, Jackson, Mich.

This makes a total of sixty-five new members elected within the last thirty days.



## On the Road to Ocampo

By Winthrop E. Scarritt

On the road to Ocampo  
Now the flying autos go,  
And the siren horn is heard  
From out the trail of the dusty bird.



Winthrop E. Scarritt

I am to tell the story of the most terrible test of an automobile that has come within my personal experience, and incidentally it will involve some reference to the achievements of a man who has developed a Commercial Empire in

Northern Mexico by opening up her mines and forests, building railroads, tunnelling mountains, transforming a desert into an oasis—in short, accomplishing in the face of almost insuperable difficulties that which his great prototype, Cecil Rhodes, did for South Africa. Such a man is Colonel William C. Greene, the Copper King. He has used the automobile more and under harder conditions, I believe, than any other automobilist in America. With him it is no toy or pleasure vehicle. It is a machine which he utilizes in the serious business of life because it saves time, which is invaluable.

Journeying together on a Pullman to Boston one afternoon in April, and knowing my weakness for the motor-car, he tempted me by an invitation to go to Mexico and take a trip into the heart of the Sierra Madre Mountains. Eagerly I accepted the invitation and forty-eight hours later, in the private car "Ahumiada," we were on our way.

Others in our party were that gallant soldier, Governor U. A. Woodbury, of Vermont, Judge Warren Foster, the eminent and learned judge of the Court of General Sessions in New York City, Hon. J. B. Showalter and J. V. Ritts, prominent capitalists of Butler, Pa., and Mr. and Mrs. Alfred Romer of Brooklyn, N. Y. To Mrs. Romer belongs the honor of being the first woman to journey by motor-car into the Sierra Madre Mountains. She endured the fatigue and hardships of the journey uncomplainingly and with a cheerful optimism which called forth the unstinted admiration of every one else in the party.

But I am getting ahead of my story.

The journey from New York to Cananea, Mexico, was a most pleasant one. What was our delight to be met at the station by a 24-H. P. Panhard and whisked through the streets of a picturesque city now numbering twenty-five thousand inhabitants. Here we visited the copper properties which are now regarded as among the greatest in

the world. It is at this point the recent riots occurred which, owing to the commendable energy of the Mexican officials, were promptly stamped out. This mining camp is distributing \$400,000 to its stockholders every sixty days and adding 5,000,000 pounds of copper bullion every month to the wealth of the world.

By railroad we went to Temosachic, the terminus of the Chihuahua & Pacific R. R., in the State of Chihuahua.

We had brought with us two Panhards (a 24- and a 40-H. P.) and two Pope-Toledo 45-H. P.

Our first excursion was to Dederick, thirty-five miles west of Temosachic.

Here we visited a small portion of the pine timber lands of the Sierra Madre



A FORMER PRESIDENT OF THE A. C. A.

Land and Lumber Co. We rode through immense forests of trees, many of them as straight as a gun barrel and often ninety feet to the first limb, with enough healing in them for all the nations of the earth.

Much of the lumber used in the mines of Mexico is brought from distant Oregon. Two railroads are now building into this, the largest tract (over 2,000,000 acres) of virgin forest remaining in America, and when they are completed a bonanza of hitherto unusable wealth will be made available.

West of Temosachic, nestled in the Sierra Madre Mountains, lies Ocampo. More than a hundred years old is this

Mexican mining town, and a little more than a hundred miles from the trail of the iron horse.

Over a newly built mountain wagon road was to be our triumphal journey, or, alas, would it be a "retreat from Moscow!" Under a cloudless Mexican sky, than which none is bluer, and through an ambient air, than which none is sweeter or more intoxicating, started we that glorious morning for the distant Ocampo. The big Panhard was left behind and we had the 24 H. P. Panhard and the two Pope-Toledos. Merrily we bowled along the first ten miles over a good country road with no worse mishap than occasionally getting stuck in the soft adobe. Then we entered the foot hills of the mountain range. Formerly the only way to get supplies into Ocampo, or the ore out to the smelters, was over steep mountain trails on the backs of burros. Recently there has been built at large expense a mountain road over the entire distance to Concheno, thus practically doubling the producing value of all these great properties at Ocampo. For a mountain road it is most excellent. In many places it was blasted out of the precipitous side of the mountain and these places not infrequently on a sharp curve. The breaking of a steering lever (just what did happen later) or the skidding of the car for thirty-six inches meant a sheer drop of a thousand feet and disaster too horrible to contemplate. Where the surface was hard and smooth, our cars climbed well until we reached an altitude of some 6,000 feet above sea level. Here we began to experience carburetor troubles. Especially was this true with the Panhard. The higher we climbed, the greater the difficulty. The car seemed to get weak in the knees, as it were, and puff like a fat man quite out of breath. The Pope-Toledos had much less difficulty; in fact, were going quite well when a stupid driver of a mule team in passing ran his wagon into one of them and tore the tonneau half off, besides doing considerable other damage, placing it temporarily out of commission.

By two o'clock in the afternoon, half the journey was accomplished. After luncheon at a good mountain-camp, the worst of the journey was begun. Seven thousand feet up in that thin mountain air the sun seemed too close and too hot. How the engines did groan and sizz and snap! Much of the time we were compelled to drop to low gear. Even then, occasionally, as the car would begin to slow down at a particularly steep grade, we would swing open the side door and all leap out and push. Many of these grades could have been taken with the live load had there been any opportunity to charge them from a flying start, but such was not the case. Some of the grades measured over 20%

and not infrequently curves and grades came together without opportunity to rush them. Sometimes through sand, up in this rarified air, under a blazing sun—all these things combined put the motor-cars to as severe a test as it was possible to devise. This was a real, not an artificial, endurance test. But the end crowns the work and as we reached our highest point, 9,000 feet, the Sun god forgave us intrusion into his

mountains the precious ores and they have been at it ever since. Here is one mine, the famous Santa Juliana, which the Mexicans by their crude methods have sunk to a depth of 900 feet. They have, according to the tax receipts of the Government, taken out over \$100,000,000 in gold and silver from this single mine. All this ore was dug out by the most primitive methods and brought up chicken ladders (notched

That night we were tendered a *baille* (ball) by the *Jefe Politico* (Mayor) M. Aguilar of Ocampo. This official we found to be a most charming and cultured Mexican, speaking English fluently. He made an eloquent address of welcome, to which the Colonel responded appropriately in the Mexican tongue. Then followed the dance. The pretty black-eyed *senoritas* could not speak our harsh English, nor could we speak their charming *patois*, but I am sure, from their smiles, they understood the eloquence of our eyes which shone in admiration of their grace and beauty. They peppered us well with confetti and we heartily returned the compliment.

The next morning we took the backward trail to our waiting autos. The return to Temosachic was down hill and of course easy. I fear at certain points we hit it up a bit too fast for safety. But then there were no "cops" about and we were homeward bound.

This journey proved that our cars, for mountain work, should be geared lower, that we should have an extra break, and also a sprag on each car. Also the carbureter should be somewhat modified. With these slight changes, automobiles will meet the hard conditions and be wholly practical for the work.



A BENT IN CRANKSHAFT



STUCK IN MEXICAN ADOBE

hitherto unconquered fastnesses and withdrew from the contest to his night's retreat beyond the Western sea. At the Navidad mines, we rested for the night and in the early morning continued our journey to Pinos Altos, the present terminus of the wagon road. Here we changed from auto to muleback and struck the trail for fifteen miles into Ocampo.

This quaint town of 5,000 inhabitants is most interesting. When Washington was fighting for our independence, the Mexicans were digging out of these



THE WAY ABRAHAM PLOWED ON THE PLAINS OF MAMRE, NOW USED IN MEXICO

poles) to the surface on men's backs; then put on burros and carted 150 miles away to a smelter. When water was reached, the Mexicans, having no way to get rid of it, stopped work.

Now comes in the Greene Gold-Silver Company and with American genius, American brains and American scientific up-to-date methods take up this work where it was left off. What must be the result?

We visited also the famous Ronquillo, Guadalupe, San Juan, Balvanera and many other enormously rich properties of this company.

With the early finishing of the wagon road, with the completion of the modern crushers and smelters, I predict the day is not far distant when the fame of Ocampo will be known around the world.

Last summer it was my privilege to enjoy an automobile trip over the matchless roads of France and Switzerland, even into the heart of the Bernese Alps.

These two trips, both unique, both interesting, both enjoyable, cannot be compared with each other; they may be contrasted only. Indeed, the one is an antithesis to the other. The former was over roads that had been built a thousand years in the heart of the old world, in the midst of a vast population and through a civilization the highest on earth. The other, over roads so new that the powder marks still cling to the blasted rocks of which the highway is built, through a sparsely settled country where the inhabitants are living as did Abraham on the plains beyond Hebron, and where the peasants are using oxen and a crooked stick for a plow.



But it was on the latter trip that the motor-car best demonstrated its ability to endure punishment, and, notwithstanding the difficulties, "to arrive." For four years Colonel Greene has been using motor-cars in Mexico under conditions which, to any other man, I know, would seem impossible. Driving his Panhard one day over a rough road, I remarked, "Colonel, I fear I will break the car." He replied, "If you do, we have a big machine shop. We will repair the damage and go on." This is the spirit of the man. Big, broad, brainy, far-seeing, fearless whatever may betide, whatever obstacles may be met, whether it be a criminal mob in Cananea or a no less criminal mob in Wall Street, this unconquerable American will repair the damage and "go on."

### The Cananea Riots and the Automobile

We publish in this issue a most interesting article entitled "On the Road to Ocampo," dealing with a motor trip in Mexico. More recent advices show that the automobile played a most important part in saving the day during the riots at Cananea. Not infrequently



CROSSING, NEW RIVER

in human affairs years of destiny are crowded into minutes of time. Such a crisis confronted Colonel Greene, who not only showed himself courageous, but one of the most resourceful captains of industry of modern times.

His ability to speak the Mexican language, his knowledge of human nature and the character of the people with whom he had to deal, together with his power to get from point to point rapidly in his automobile, saved the day.

A graphic picture shows the colonel addressing the rioters from his motor car as calmly as though the occasion were a summer picnic. He quieted the

turbulence of the mob by his personal magnetism and stayed their hand until suddenly the screech of a locomotive gave signal that the soldiers were at hand and the crisis past.

We quote from a letter written by Colonel Greene recently to a friend in this city:

Cananea, Mexico.

I enclose you two or three little photos, taken during our recent ruction here, which show that automobiles have their uses. I think the three or four autos we had saved this company a good deal of money. A vehicle that would get from one end of the camp to the other in a minute and a half was something our rioters did not count on. I presume that many who had



CHARGING A MEXICAN STREAM

never before seen an automobile felt a good deal as the Montezumas did when Cortez and his men came among them on horseback; were not exactly certain whether it was a bird or beast, but knew it was hell. Our chauffeurs, you know, thought that the Sierra Madre expedition was brand new experience to them, but they have forgotten all about it since they went through the riot. As a civilizer, I am not exactly certain whether a Panhard or a Pope-Toledo is the most efficacious, but the automobile is all right in cases of that kind.

Sincerely your friend,

W. C. GREENE.

### Took in All Automobilists

Policemen swear to anything in Jersey and the Judge always takes their word as against that of the common layman. Harrison, N. J., has a versatile "cop" whose testimony varies accord-

ing to the statements of the victim apparently. Harrison, be it known, is a point just at the end of the ill-smelling turnpike within smell of the bone factory of fertilizer works and just at the edge of the dumps. Harrison has lain quiescent for many a moon but a wise judge saw the opportunity to do things so a law was enacted and without warn-



A ROCKY BIT OF ROAD

ing put into effect Sunday, May 6th. Every automobilist was held up, slow or fast, and the policeman made his testimony to fit the case. Miss Havemeyer, when taken into custody, gave her ring as pawn, and Joe Nelson, when arrested, gave his watch. Nelson was traveling at a comfortable gait and when a man waved to him he stopped his car in its own length and asked particulars. Told he was under arrest, he said: "But what speed was I making?" Upon being told he was going thirty miles an hour he said: "This 'car can't go but twenty-five." Whereupon the policeman haled him to court and swore volubly that Nelson was going 16 miles an hour.

When Nelson told the Judge that the "cop" had accused him of going thirty, the "man from off the dumps" said "well I cut it in two just to be safe." The day following he asserted, "We just pulled everyone who came across the turnpike." It was fat pickings for the constable whose unsupported testimony went against all appeal of the victims. Under the new law as it is interpreted, there will have to be proofs, and the constable who fails to prove the case will pay the charges.

Incidentally Harrison bore no sign of



a speed law having gone in force and according to legal men twenty miles an hour was legal. However that may be, and the members of the Legal Committee of the N. J. A. and M. C. have been asked to fight the case, it is well to remind motorists that it is best to be circumspect in passing through Harrison lest the "Poogy Man" get them. It is quite probable he will get them anyway, and under the influence of Red Rye

building which have been erected at 1470 Michigan avenue.

The American Locomotive Company, which is building the Berliet, will open an agency as soon as its new building near Sixteenth street is completed. The Clement-Bayard Automobile Company and the Jerome A. Ellis Company will jointly occupy the building at 1408 Michigan avenue.

Since last moving season the McDuffie

1328, and the Twentieth Century Company obtained quarters at 1330 for the Grout agency.

### Freylinghuysen Law Lost New Jersey a Model Town

By F. Ed. Spooner

When New Jersey passed its Freylinghuysen bill it lost a town, a great big advertisement, and automobiling generally suffered. Mr. S. E. Gross, of Chicago, a multi-millionaire, constructor of no less than twenty-one towns around Chicago, including Gross Park, Gross Dale, Gross Terrace, and many more equally as important, had practically made up his mind to build in New Jersey, contiguous to the eleven hundred miles of good roads in that State, a Spotless Town. For a lifetime it has been the ambition of Mr. Gross to construct before death a really model town, a town so different from all others as to be in reality a monument to Gross energy.

The writer talked over the matter with the great Westerner, and it was decided to go ahead with plans for a town in New Jersey, which, had the plans been matured, would have created world-wide wonder. In brief, this town was to be a Motorists' Dream, a town given over



RESIDENCE OF COLONEL GREENE UNDER GUARD. See page 37

make any sort of statement regarding their speed while the Judge takes his word unqualifiedly and convicts the motorist of being a liar upon general principles.

### The Automobile District of Chicago

The automobile trade of Chicago is gradually taking up quarters on Michigan avenue between Sixteenth street and the Auditorium. Other districts have a few automobile stores and garages but Michigan avenue is absorbing the bulk of the trade.

Thomas P. Jeffery & Co., Studebaker Bros., Apperson Bros., Wayne Auto Company, Geyler & Levy and a few others remain on Wabash avenue. The latter firm has recently secured the agency of the Lozier in addition to the Autocar, which it has handled for several years. The Waltham Orient is one of the new firms to secure a Wabash avenue site.

The Hamilton Automobile Company will take possession of the first floor at 1251 Michigan avenue, the second floor to be occupied by Fanning & Canary, representatives for Michelin tires. The Fisk Rubber Company, which has occupied the building, will move to 1440.

The White Garage will take possession of the entire building at 240 Michigan avenue, the second floor of which the White Company has occupied for several months. The Bennett-Bird Company, representative for the Corbin and Dolson cars, will move into the new



COLONEL W. C. GREENE ADDRESSING THE RIOTERS FROM AN AUTOMOBILE

Auto Company has opened its building at 1503, the Ford agency has located at 1444, C. A. Coey has established quarters for the Thomas at 1424 and the Northern Motor Company has taken possession at 1449.

The Rainier Automobile Company was one of the first firms to open a Chicago agency this year, locating at 1253. The Cassidy-Fairbanks Company secured headquarters at 1413 in order to take care of the Cleveland interests. Githens Brothers secured the Stearns agency in conjunction with the Oldsmobile, which they have handled for several years at

entirely to motorists and exclusive in every way. Mr. Gross intended to construct the entire town along the most novel lines ever planned. Imagine, you will, a town of a thousand houses, with every house a paradise of convenience, back of each house an automobile garage, in front of all houses asphalt streets, light, water, gas, sewer, and everything desirable to be found there, and every street and alley closed to aught but automobiles. No horses, no cows nor other domestic animals would be allowed on the streets of this Spotless Town. The asphalt streets

would extend to the borders of the town and then pass under a wide asphalt speedway completely encircling the town, a speedway slightly raised on the outside and without a real turn throughout. Imagine such a town and imagine a man who does things with the Chicago "I Will," and it may well be imagined that New Jersey lost out when it passed so strenuous a bill. Mr. Gross in a letter says: "I cannot see why automobilists live or travel in a State which acts as New Jersey has done, and until New Jersey makes itself in reality an automobile paradise as it should be, with its roads, I will hold up my plans."

The climbing contest at Dead Horse Hill, Worcester, Mass., May 24, was of importance from many points of view and brought out the fact that it is the policy of the Pope Manufacturing Company to pursue the conservative plan followed by foreign makers in rating the power of its gasoline engines low rather than high. It sometimes happens that a 20-25 H. P. car is noticed to be doing far better work in hill-climbing

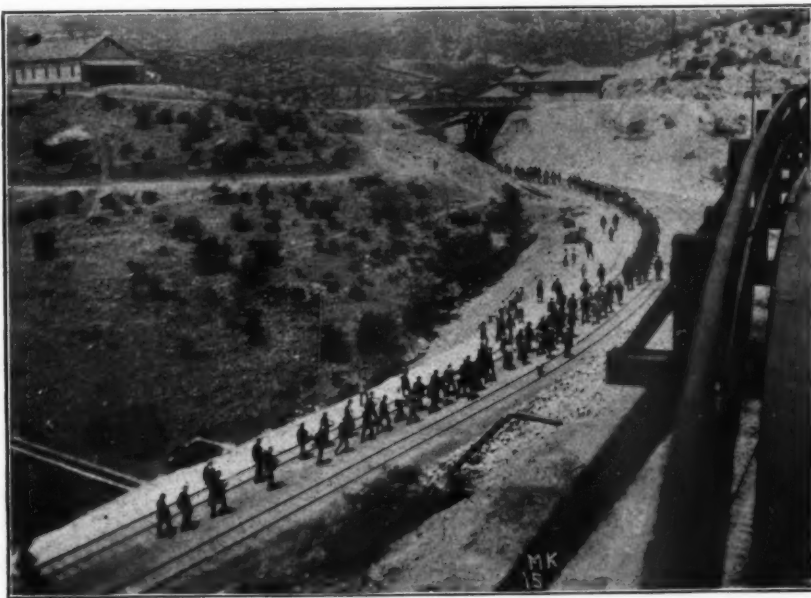
## An Afternoon On Broadway, New York

By James Kennedy

There is something doing almost every day among the unmanaged automobiles in New York City, that were it reproduced on the stage, prices would



COLONEL GREENE IN MIDDLE



GUARD ON THE WAY TO PROTECT THE PROPERTY (See page 37)

and general endurance than another machine rated at even double the horse power.

Improvements are contemplated at the Western Motor Works, Lafayette, Ind. During the coming summer three new buildings will be constructed which will increase the capacity of the plant fully 50 per cent. Steam power is to be done away with and dynamos substituted. Business has improved to such an extent that these improvements are imperative. The plant now employs 260 men and it is said that more are needed. The weekly pay roll is \$2,700.

go up and the houses would come down. Sometimes the happenings deepen into tragedy, but for every real sorrow there are a hundred shadows, and it is a consolation that the incidents are usually of a comic character.

One day last month the blood of a great crowd was stirred at Times Square. A touring car driven by a chauffeur prim as a French dancing master, and two elegant ladies in the rear seats, stopped at the Victoria Theater. The chauffeur left the machine standing and disappeared in the theater. He was just inside the door when the auto started off. The younger of the two women, Mrs. Woods, who was Louise Beaton,

an actress of the melodramatic type before her marriage, stood up and screamed. She had learned to scream in Robert Buchanan's melodrama, "Alone in London," but she never reached that blood-curdling cry of anguish in her palmiest days. There was no acting this time. It was the real thing. Late comers to the matinee stood spellbound. Strong men ran as if competing for the Pentathlon wreath. As the reeling, plunging, devil wagon rushed on, Mrs. Woods climbed higher and jumped into the arms of a stalwart policeman who had joined in the race. Up to this time the auto had been leaving the west and traveling east, but suddenly changed its mind or its course, rather, and turned due south and struck a heavy truck with a terrific blow. The elder lady, the mother of the actress, had been climbing up in the seat of the car, was giving a good imitation of the daughter's screaming, and also had begun to prepare to jump when she was rudely tumbled to the floor. The undaunted automobile was making a few backward turns preparatory to making a second attack on the truck, when at this psychological moment the chauffeur appeared, jumped aboard, pulled the lever and the car stood still. He muttered something about the pernicious effects of vibratory action on the double charging of ignito carbureter attachments, and gathering up the scattered portions of his party, the automobile glided gracefully homeward.

A little further down Broadway another auto suddenly broke loose. The hind wheels began moving, then the fore wheels. The machine jumped forward and then backward. Everybody was terrified. The driver, Mr. John Docherty, a native of the green island, who had been carelessly whistling "The Girl I Left Behind Me," and leaning against a lamp post, heroically jumped on board the refractory machine. He tried every lever there was, but to no purpose. Fortunately the auto danced toward the middle of the street and John and his machine had the center of the stage to themselves as everybody fled in panic. Finally with a terrible snort the automobile rushed to the sidewalk and rammed the fire alarm post at the northeast corner of the Hoffman House. It was all over now. In an instant the untrollable terror became a lamb-like, quivering wreck. Presently it was towed away by a tame automobile to a shop where its owner, Mr. John Bell, of 71 Hudson street, will have a repair bill that will make him think twice about the trip to the Berkshire hills that he was going to make this summer.

An old Indian medicine man told me



that there were three things that it takes a strong man to hold—a young warrior, a wild horse, and a handsome squaw. The poor Indian's experience was limited. He knew nothing of an automobile with a disarrangement in its interiors or he would have added that to his list. In regard to the degree of mastery which we are slowly acquiring, it is observable that the Wednesday evening meetings of the Young Men's Christian Association are no longer en-

Gillis, engaged him as shop superintendent, in which position he achieved enviable success.

President Morris of the Automobile Club of America has appointed Angus Sinclair chairman of a committee to arrange tests of automobiles equipped with the appliances necessary to make alcohol a success as a power medium.

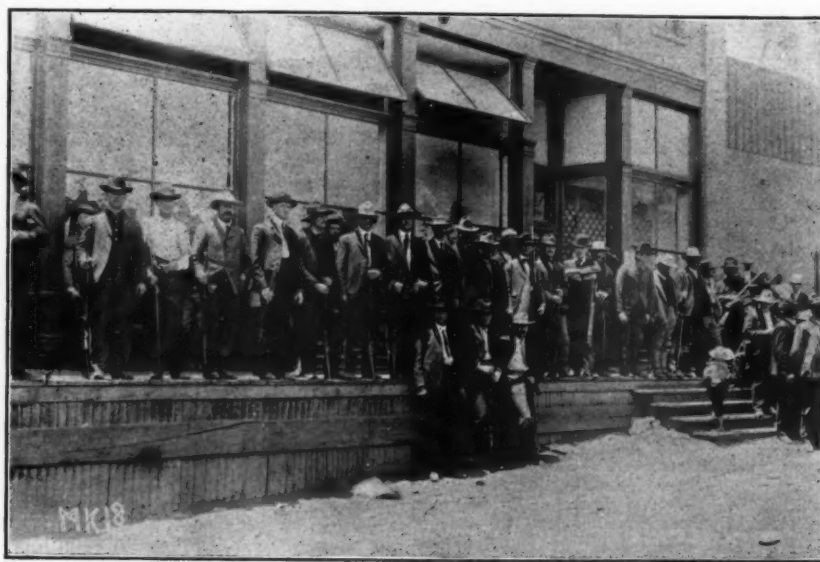
Fifteen thousand miles in an automobile is a big mileage to roll up in a few



POLICE STATION (See page 37)

tirely given over to abstract speculative theorems as to the absolute need of vicarious atonement, but the large hall is crowded to suffocation by anxious disciples gazing on the vast illuminated screen reflecting the component parts of automobiles of all possible shapes and sizes, and possessing relations of similarity, difference, ratio, speed, contiguity and interconjunctibility, and also to listen to the lucid and eloquent description of those infinitesimal fractions of position which constitute the dominant factors of the marvelous evolution of the twentieth century automobile.

Mr. H. A. Gillis, who has been for the last nine years superintendent of the Richmond Locomotive Works, has resigned to accept the position of general manager of the Autocar Company, of Ardmore, Pa. The Autocar Company are certainly to be congratulated on securing the services of Mr. Gillis, for he has been regarded in railway circles as the ablest shop manager in the field. He combines in a happy connection the working machinist and the scientific mechanical engineer. He is a graduate of the U. S. Naval Academy, where he received an excellent scientific education. From that he entered a railroad shop, worked as a machinist, rising through the steps of gang foreman, shop foreman, general foreman and master mechanic. Then the managers of the Richmond Locomotive Works, perceiving the ability of Mr.



EMPLOYEES OF THE GREENE COPPER CO. (See page 37)

weeks, but to pile up 15,000 miles in a car and never touch a wrench or screwdriver to it, in fact, never make a repair of any kind and experience but one puncture in this running, is something of a stunt. This has happened to Pete Bellew in his tour of middle west and eastern cities in a twenty-four-twenty-eight horse power Columbia car. During the Atlantic City meeting Bellew drove onto the beach for the first time as an entrant in the event and was beaten in his touring car by one-fifth of a second in a large field of starters.

for one refuse to do the bidding of the lawmakers who make laws and do not know what they are making."

#### An Over Official Cop

Every word of this conversation flashed through my mind out on Jerome avenue at 189th street, Saturday, May 26, the closing day of the outdoor automobile show. Assistant Manager Teaboldt, of the Packard Motor Car Co., of New York, had offered to convey the writer and some friends to the Empire track, and was returning with them. He choked

## More Mobilettes

### A Sensible View of Moderate Speed

It was a year ago that a policeman in Central Park during an interval while a tire was being repaired said, "Do you see that car going by? Now, how fast would you say it was going?" Informed that the car was hardly going slower than fifteen miles an hour, he remarked, "Well, I should take it in, but I won't. The two men in the rear seats are ministers of the Gospel and they are doubtless going to deliver a sermon. They would get right up in court, too, and swear on a stack of Bibles that the speed did not exceed eight miles per hour. Then what would a policeman do with his testimony? Then again what nonsense this law which requires eight miles an hour really is. Why, were all motorists to be held to that speed the daffy institutes would be filled with them in a month. On the police parade we walked our horses three miles in a half hour, which is six miles an hour. Just imagine holding a high-powered or even a low-powered automobile down to little better than the speed which a horse will walk right along. Why a man walks four miles an hour easily and they want to keep an automobile down to twice the walking speed. Not for mine, for I



down the big Packard to the last notch and the trip was a pleasant visit until an officer—God save the name, providing this man was fit to act as one—came up beside the car and stopped it. His declaration that Mr. Teaboldt was under arrest came like a bomb from a clear sky, nor would he listen to a moment of explanation. He had caught a sucker who was not going fast enough to get out of his way and he intended to land him and so gain the credit, afterwards given him by the Sergeant of the 37th Precinct, of being a "Conscientious officer." In every probability that sergeant would have classed the man in the category with Ananias and his clique. However, he insisted and there was nothing to do but go to the station. This was done at a snail's pace, the officer just about tumbling from his wheel, so slow was he forced to go. There a bond was put up and the sergeant said, after this man had sworn to 22 miles an hour, "It won't do you any good to fight it. You might just as well pay. The officer is put there to catch your time. If you say that you know at what speed you were going they will simply ask you why you were timing." So it seems that the word of one policeman is far ahead of the sworn statements of five passengers in a car, all good judges of speed. Fight you cannot, and although the officer be the greatest liar on earth, there can be no resource.

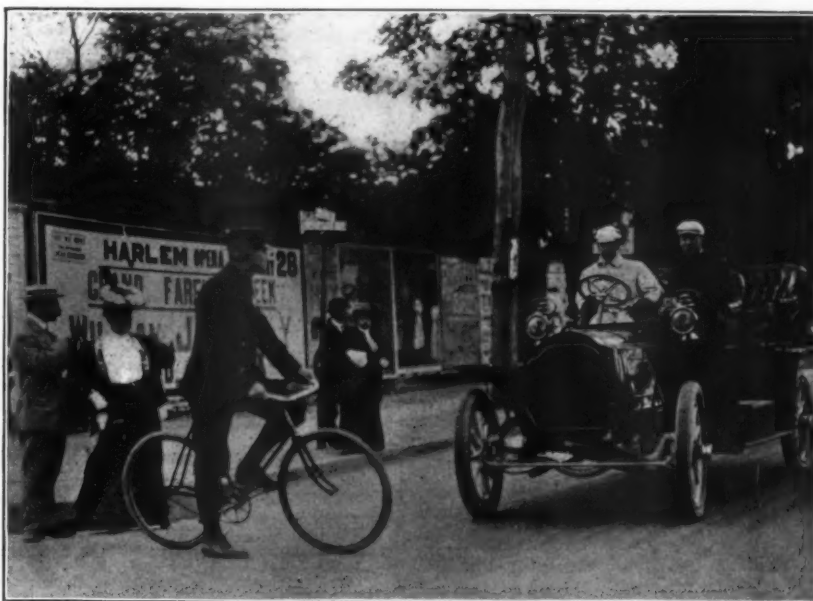
In the police station the officer merely states the complaint. Any effort to explain away the false statements of the policeman who is engaged in trying to get honors for being conscientious by swearing to anything, are promptly squelched. At the 37th Precinct on Bathgate avenue the sergeant is a gentleman, but he has to stick up for the policeman. In whatsoever barrel a rotten apple is placed there will surely follow others also rotten from contact with the original, and it is quite probable that this sergeant is new to this business. He is too good a fellow to explain the matter any other way.

#### Conviction a Foregone Certainty

All of which brings us again to the statement of the Central Park policeman who had solved the problem. As a matter of fact, Mr. Teaboldt in the Packard was going about twelve miles an hour. The roadway was clear, he had allowed other cars to pass frequently rather than take the chances of arrest, and the trip was being made tantalizingly slow. Again and again the slick running Packard had been checked up, for riding in the cool of the evening was a pleasure to be prolonged after a more than ordinarily warm spring day. No thoughts of police had come to mar the trip other than those which must come to every motorist who is compelled to believe himself a criminal. Policeman Wm. Keily had allowed half a dozen

cars to pass in the lead, and Mr. Teaboldt had allowed them to keep the lead. The pace had attracted the attention of no other policeman, but this one quite evidently considered one arrest necessary, and with a glance picked out "us." The complete nonsense of the matter was really refreshing and comical to say the least. But we had to go to the station, and on the way Policeman Keily was forced to "know himself," as others had just learned to know him for opinions passed freely to the policeman who had the patience of Job. Doubtless there have been countless other cases of like nature and bicycle policemen have some to be "Ridicule Proof." Perhaps the

just this way, then the man who has much city driving to do must secure a car known to be slow, and he must use that. According to the sergeant, the man who drives a Packard is convicted at the outset and has no defense. Years ago Chairman Mott, of the Racing Board of the League of American Wheelmen, took a step which caused a scandal, for he made men professionals who rode a yellow wheel, the product of E. C. Stearns & Co. There was no defense. Barney Oldfield, the champion to-day of automobilists, was driven into the professional ranks by the unjust edict. Chairman Mott simply took the good and the bad and threw all into profes-



OFFICER KEILY, 37TH PRECINCT, ARRESTS ASST. MANAGER TEABOLDT OF THE PACKARD CO., HENRY SIEGEL, J. B. F. HERRSHOFF AND OTHER USERS OF PACKARD CARS FOR WHICH HE HAS AN AVERSION

reviling added miles to the hour score, for it must be certain that this officer knew naught of the speed to which he swore, and anything said would go anyway. It is so with others, so this may not be news, but to the uninitiated it might be well to suggest that tongues be kept still, for policemen "know not the truth as a rule and stretch the truth beyond all recognition." This one did, and when the writer spoke out in the station he was reprimanded by the sergeant for saying anything. There's really nothing to say. The motorist is convicted a criminal at the outset and looked upon as one to the finish. He really has no defense.

Now as to results: The sergeant said that he had been told that a Packard car would not travel slower than ten miles an hour, and he took it for granted that no driver would drive as slowly as it was possible. He erred, but advice to this effect did no good.

#### Discriminating Against Packards

Providing affairs are to be managed

sionalism, causing a loss of thousands of dollars to the firm making the yellow wheels. Doubtless the Packard Motor Car Co., on the strength of this declaration, might bring action against New York for heavy damages.

Looking at the matter seriously, one would come to believe that the men who set a limit of eight miles an hour did not intend it to be obeyed, for that is impossible. It therefore gives policemen an unlimited field for persecution, for all automobiles go from twelve to fifteen miles an hour right along. The policeman may pick those who look "easy" and then either gather in the "graft" or take them to the station. Nor are the bicycle policemen averse to a handshake when a certain soft piece of paper passes, for cases have been rather frequent of late where men have said, "I slipped him five, and it was all right." Incidentally no endeavor to slip Officer Keily was made. Had this been done the results might have been interesting to note.

## More Personals

### Alfred Reeves

Alfred Reeves has finally landed a real plum. For years Mr. Reeves has been advancing from a position of office boy up the ladder rung by rung. He is now manager of the American Motor Car Manufacturing Association, a position which will pay him a handsome salary and save his hard work in a dozen directions. The position among the independents occupied by Mr. Reeves is similar to that held by Geo. H. Day in the License Association. That Mr. Reeves will fill the position is certain. Looking backwards it was not so many years ago that this young man entered the office of Messrs. Powers, Kennedy, Brady and Batchelder, promoters of cycle racing, as an office boy. He worked hard and no amount of detail phased him. He worked day and worked night, and worked night and day for weeks and months. Gradually he rose in the ranks, became secretary of the Road Drivers' Association and secretary of the Empire Track. He worked into automobiling and everything he touched was a success. Until lately he has not scored a failure, and the Outdoor Show should not be charged too heavily against him. In the past Mr. Reeves has been secretary of so many things that he has come to be known as "The Secretary," and the step into the active management of a great combination of automobile manufacturers is a step in the right direction. The association offices are to be removed from Chicago to New York and will be located at 29 West 42d street. In all probability the assumption of his new duties will require that Mr. Reeves give up his position on the New York Globe.

Archie Hughes, of Hughes and Force, Philadelphia, agents for the Pierce in the rather slow yet rapid city when it comes to separating motorists from their money for State and city licenses, tells a good story illustrative of the rapidity with which Pierce cars have been sold this season. Mr. Hughes had sold his allotment of cars and when San Francisco burned managed to get one or two more that had been ordered by the agent in that city. One of these was on the floor. Mr. Hughes knew a man that wanted a Pierce and sent for him. The gentleman came but was coy, and Mr. Hughes had to argue. Meanwhile another man entered the store, asked whether a Pierce car could be had, and was referred to Mr. Hughes. This gentleman led one customer round the car to keep away from the second, who was finally approached by a friend of Mr. Hughes. When told that the car was to be sold he walked to the desk, wrote out a check, and turned it over. The original customer finally decided to take the car, only to be told

that the car had been sold right under his nose. He was mad and the purchaser was delighted. Orders for 1907 are now being booked by Mr. Hughes, and the customer who did not act quickly took the bull by the horns and got his order in for next year.

Mr. E. R. Thomas, of the Thomas Motor Co., Buffalo, N. Y., has established an engineering department in France which has been maintained at a heavy expenditure for many months.

The news is all the more noteworthy because Mr. Thomas is almost universally accepted as the uncompromising champion of American automobile construction, and has persistently maintained that the alleged superiority of foreign cars was a myth.

The announcement of his foreign investment was nevertheless authorized by Mr. Thomas himself, who smilingly re-



ALFRED REEVES

plied to the suggestion that it might imply an admission that his views concerning American supremacy were changing by saying:

"On the contrary, if you will study the situation a little bit you will see that our move is dictated by the thoroughly American policy of taking the best the world has to offer and improving upon it.

"Any other policy would be narrow, insular and unbusinesslike. If America were held back at all in the first few years of automobile construction it was because her builders cockily and contemptuously refused to consider the good work of those who were pioneers in the industry abroad; preferring to follow out certain more or less freakish mechanical features of their own. Years were lost in uncertain experimental work which might more profitably have been utilized in following the same basic ideas of construction which had been worked out abroad.

There's one man in the automobile game that deserves to succeed, a man whose interests are in the automobile and who does everything within his power to aid the sport and pastime. That man is A. L. Kull, of the Wayne Motor Car Co. of New York. Whenever an entry blank is handed Mr. Krull for anything, his signature goes to it, and within an hour it is on the way to headquarters to encourage others to follow suit. These early entries by promoters have been appreciated. Win or lose, Mr. Krull always smiles and feels cheerful, and he does not complain. When in the Long Branch six-day run of last summer his car went wrong he did not quit in disgust, but kept on to the finish of the week, and gained honors, too. When in his six-day non-stop run in New York his car ran into a wagon or rather a wagon backed into it, he did not complain, but gained honors from that which had been accomplished up to the time of the unfortunate incident. In track, road or hill races, he is always a contender, and in tours and other events he is always first to the front. Incidentally the Wayne Company at Detroit seemingly appreciates an agent so live as this New Yorker, for it backs him in everything, joining heartily in the great special trip to Ormond, engineered successfully last January.

Down in Florida Alexander Schwalbach, now traveling representative for the Hearst syndicate of daily papers, was so youthful in his ways that people who met him would not for a moment believe him fifty-two years of age. Mr. Schwalbach was talked about a great deal, and was variously known as "Switchback," "Schwartzenkopf," and "Schwartzpack." Floridians considered that they had found the man who had finally discovered the Fountain of Youth sought by Ponce de Leon, and jokingly he was asked regarding the location. As a matter of fact, the trade to-day includes no man as young for his age as Mr. Schwalbach, who is frequently mentioned as "fifty-two years young."

Word has been received from E. W. Sutphen, of the English Daimler Company, of this country, that work is being started upon the Vanderbilt Cup Racer. E. S. Partridge is in London with Mr. Sutphen and ere they return, after witnessing the Grand Prix, it is believed that they will have a pretty good line upon this car. The driver will be either Guy Vaughn or J. H. Harding, both of whom will have seats in the car.

It was "23" for John C. Kerrison, of Boston, when he lately left the staff of the Boston Herald, on which he has been employed as cycling and automo-



bile editor for twenty-three years, to join the staff of the Boston American at a salary said to be double that he formerly received. Mr. Kerrison has become so strongly identified with the Herald that it does not seem possible that he has joined the staff of another paper.

Walter Christie's 1906 cup racer is going to be a wonder. It will be a vast improvement on anything turned out by Mr. Christie before and will be even faster than the car which tied the World track record of :53 and traveled at a rate of 103 miles over the course at Atlantic City. Mr. Christie will operate the car himself.

Joe Tracy will again drive a Locomobile in the Vanderbilt Cup Race. The Locomobile Company of America has constructed two cars for the great race and the driver of the second car has yet to be named. Mr. A. L. Riker, who designed last year's most successful car, said some time ago that the Locomobile would have a much faster car than last year.

Tom Cooper has been instructed by Mr. Singer, of the Matheson Company, to secure his quarters at once down on Long Island and to be prepared to camp there with his mechanics at a very early date. Cooper will drive the Matheson Cup Racer, which is to be ready some time in July. The old-time cycle champion will thoroughly tune up the car before the elimination trials.

Mr. George I. Rockwood has been appointed Professor of Steam Engineering in the Worcester Polytechnic Institute. Mr. Rockwood is a graduate of the Worcester Polytechnic Institute in the Class of 1888, and is one of the leading authorities in this country on the subject of Steam Engineering.

Harry Mains has been selected, it is said, to drive the B. L. and M. car in the Vanderbilt Cup Race. Mains has hitherto been known as the operator of the unsuccessful Grout steamer, a car of speed which has never done much. Breeze, Lawrence and Moulton have their car nearly ready.

W. I. Fickling has purchased the entire interest of the Automobile Cover & Top Mfg. Co., 154 East Fifty-seventh street, New York. The plant is being enlarged to accommodate painting and repair jobs on automobiles, together with all kinds of limousine, tonneau and automobile body work.

They say that the Stanley steamer

which is to be an entrant for the Vanderbilt cup, is lightning fast, and that driven at one-half its speed it will prove a wonder and stay the limit without a doubt. In all probability Marriott, the two-mile-a-minute man, will operate the car.

Percy Pierce, of Buffalo, completed the great Herkimer tour with a clean score, but was not named in the first ten in the contest. Mr. Pierce acquitted himself in a creditable manner and his car ran like a charm throughout.

The Toledo Auto Touring Co. has selected the following officers: President, John Stollberg; vice-president, Louis E. Krieger; secretary and treasurer, Frank G. Crane.



BOARD OF FREEHOLDERS OF ESSEX AND HUDSON COUNTIES, N. J., VISIT LONG ISLAND TO INSPECT THE OILED ROADS

#### Annual Meeting of New Jersey Automobile and Motor Club

The New Jersey Automobile and Motor Club has held its annual meeting and officials were elected unanimously for the year as follows: President, J. H. Wood; Vice-President, Angus Sinclair; Treasurer, James C. Coleman; Trustee, James R. English; Trustee, J. W. Mason; Trustee, W. C. Shanley; Trustee, Paul E. Heller, and Secretary H. A. Bonnell. The meeting was attended by fifty-four members, an unusual attendance, brought about through the ticket nominated by fifteen members in opposition to the regular ticket nominated by the Board of Trustees. This ticket was withdrawn with the exception of W. C. Shanley, who alone escaped the landslide so cleverly engineered to the regular ticket by Mr. Woods, Mr. English and others. Mr. Pratt withdrew for business reasons, it is said, and some of the other nominees were on both tickets. President Wood created some enthusiasm when he promised to see that the club was properly housed as

was recommended in the May issue of THE AUTOMOBILE MAGAZINE. The members at once voted him \$75 a month for rental of a new club house and authorized the trustees to spend \$1,000 to fit the club rooms.

#### Looking Over Good Highways

The Board of Freeholders of Essex and Hudson counties, New Jersey, made a trip over Long Island roads, June 1, escorted by members of the New Jersey Automobile and Motor Club, it being the object of the club to show the board members the advantages of road oiling as a method of laying the dust. The trip was entirely successful. The New Jersey club will select a location on a well-traveled road in Jersey and at its own expense oil the course for a mile

to demonstrate the value of the oiling method to the inhabitants and the users of the roads. At present the sweep of automobiles and wagons over the road quite clears off the surface of the road-bed, as it is ground into dust and blown away by the wind. Oiling prevents this. Down on Long Island the people were taught a lesson by the oiling of the Vanderbilt race course and the after effects, and all roads are now being oiled.

President Diaz, of the Republic of Mexico, has purchased his first American car, a Haynes, from The Central Automobile Co., of the City of Mexico. The Haynes Company feel elated over the sale, and American makers are elated, as the act of the President means a distinct advancement to American automobile interests in the republic where foreign made cars have had the call.

Laziness grows on people; it begins in cobweb and ends in iron chains. The more business a man has to do the more he is able to accomplish, for he learns to economize his time.



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## The Gabriel Horn

The Gabriel Horn, as made for automobiles, is not the loud ear-splitting instrument that we are accustomed to associate with the personage who will raise the dead by his clarion notes. The Gabriel Horn manufactured by the Gabriel Horn Mfg. Company, of Cleveland, O., is a very sweet sounding instrument; its dulcet notes soothing even the savage breast, but at the same time giving notice for all pedestrians to keep out of the way. The Horn has become very popular within a short time, 9,000 of them having been already sold this season.

Andrew J. Dawes has been president of the Automobile Club of Canada since the club was organized in 1904. Henry Beaugrand fills the position of vice-president and the executive committee is made up of some of Montreal's most representative citizens. Such men as the Hon. L. J. Forget, David Yuile, Duncan MacDonald, James B. Allan, F. H. Anson, Dr. A. Migneault, and U. H. Dandurand figure on this body, all of whom were also instrumental in forming the organization. Mr. Aime Georgrion, K.C., is the legal advisor of the club.

The following chairmen of committees have been nominated by James Couzens, chairman of the standing committee of the American Motor Car Manufacturers Association:

Show, Benjamin Briscoe, Maxwell Briscoe Motor Company; tours and races, W. C. Marmon, Nordyke & Marmon Company; good roads and legislation, Charles Lewis, Jackson Automobile Company; membership, W. H. Van Dervoost, Moile Automobile Company; publicity, C. E. Duryea, Duryea Power Company; finance, J. B. Bartholomew, Bartholomew Company; standardization, C. E. Duryea, Duryea Power Company. Alfred Reeves, the new general manager of the association, has opened headquarters in the Spalding Building, at 31 West Forty-second street, Manhattan, and is arranging the details of the campaign of expansion and usefulness during the coming year.

To the ever increasing list of automobile manufacturers may be added the name of the Watson Machine Company, of Paterson, N. J., who will place their initial car on the market next year. It is to be of 35-40 H. P., and will be known as the "Watson-Conover." The model is already practically completed, and will be running within two or three weeks. Many improvements are promised by the Watson Company, and one of the distinctive features of the car will be the introduction of a novel method of speed changes, making a very easy and simple change gear with positive action.

## For Sale

HAYNES 1906  
50 H.P. MODEL R

With \$350 worth of extras. Car run less than 100 miles and not a scratch on it. Owner going to Pacific Coast.

## ADDRESS

I. V. F., care of Automobile Magazine  
136 Liberty Street, New York

**FOR SALE**—A "Thomas Flyer," a "Mors" and a "Panhard," all in good condition. Address J. E., care Automobile Magazine, 136 Liberty Street, New York.

**FOR SALE**—Knox Runabout with top; seats four cost \$1300, will sell for \$400; in perfect running order. Address R., care Automobile Magazine, 136 Liberty Street, New York.

**FOR SALE**—40 H.-P. "Berliet," side entrance, excellent condition. Price \$4700. Address "Berliet," care Automobile Magazine, 136 Liberty Street, New York.

**FOR SALE**—Automobile Wagonettes, 10-passenger; no reasonable offer refused. Address "Wagonette," care Automobile Magazine, 136 Liberty St., New York.

**FOR SALE**—Set new Acetylene Headlights with generator, at less than list price. Address P., care Automobile Magazine, 136 Liberty Street, New York.

**FOR SALE**—Cheap—Prescott Steamer, Model C; engine very little used; in first-class condition. Address S., care Automobile Magazine, 136 Liberty Street, New York.

**FOR SALE**—\$1000 Pope-Hartford for \$600. Genuine bargain. Address W., care Automobile Magazine, 136 Liberty Street, New York.

**FOR SALE**—1905 Franklin Light Touring Car; cost \$1650, will sell for \$850. In perfect condition. Address C. D. S., care Automobile Magazine, 136 Liberty Street, New York.

**FOR SALE**—Ford (Model F) Light Touring Car. Guarantee perfect condition. Price reasonable. Address L. B., care Automobile Magazine, 136 Liberty Street, New York.

**FOR SALE**—Peerless (four cylinder) Touring Car, side entrance, top, glass front, good condition. Address J., care Automobile Magazine, 136 Liberty Street, New York.

"Sir," announced the attendant, "the telephone bell is ringing."

"Don't answer it," said Senator Muckrake. "Somebody probably wants to call me a liar."—Louisville Courier-Journal.

At the last meeting of the Massachusetts State Automobile Association, Elliot C. Lee was re-elected president, Franklin Weston, vice-president, and J. C. Kerrison, secretary-treasurer. L. R. Speare, J. P. Coughlin and W. H. Chase were chosen chairmen, respectively, of the legislative, good roads and membership committees. The association will co-operate with the American Automobile Association in erecting signboards throughout New England this summer.

**If you want absolute immunity from**  
**PUNCTURES**  
**BLOW-OUTS**  
**RIM-CUTTING**  
**SKIDDING**

**and release from tire anxiety of every kind**

**Use**

## ***Healy Leather Tires***

The construction of these tires is an evolution—the *survival of the fittest*. No tire has ever been produced that contains the peculiar virtues of a Healy Leather Tire.

Profiting by the failures and successes of our competitors, we have made the Healy Leather Tire unequalled, and have produced a tire of which it can positively be said that it is made with "The Best of Everything in the Best Place."

**HEALY LEATHER TIRE CO.,** Healy Building, **88-90 Gold St., New York City**  
 We have much to tell you—let us say it

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## Among Garages

### White Sewing Machine Company's Splendid Garage

From a ground floor 20x50 feet in a horse stable on Nineteenth street to an automobile garage with 85,000 square feet of floor space in 1906, is a record to brag about, and the White Sewing Machine Company will soon do the bragging. In May, 1902, this company found a floor space of 1,000 feet amply large, and in 1903 they moved to 215 and 217 West 48th street, away up town and out of the automobile district. The auto district soon outgrew West 38th street and competitors flocked north. Then the White Company again moved and were "Farthest North" on West 62d street, and out of the district once more. Lower Broadway, below Columbus Circle, congested and the overflow spread to far above the Circle, completely blanketing the White store by grabbing all the available places built and building on Broadway.



CHICAGO'S MODEL GARAGE, CONDUCTED BY C. A. COEY

As the business grew so the White business increased, until now it is planned to make the present large quarters a salesroom and to add a building 100x100 feet on West End avenue, between 69th street and 70th street, for a garage. The southern half of the building has a stable six stories in height and a like building is to be constructed on the other half of the plot. The garage will have 55,000 square feet, and the present salesroom has 30,000 square feet. It will now be possible to care for 500 White steamers, and provisions will be made to add several stories to the new garage as needed.

Manager Carl Paige and his able assistants, Harry Unwin, Joseph Bull and Max Green, have kept the White cars moving under a full pressure of steam in New York and the whole Metropolitan district.

It is reported that 350 of the present model White have been sold.

### A Growing Industry

The Pittsfield Spark Coil Company, of Pittsfield, Mass., bids fair to become the leading manufacturers in the rapidly growing spark coil industry. In three years they have risen from a humble beginning to an extensive factory employing about 150 men. Their 1906 coil is gaining golden opinions from the leading automobilists. It is a new creation and in point of rapidity, durability and reliability it is claimed that it surpasses anything at present in the market. It is the invention of Mr. Jacobson, an expert electric engineer, employed by the company, who has given many years' study to high tension magneto devices. It may be stated that in a recent test, made under the supervision of one of the leading manufacturers of automobiles in the country, it was found that the Pittsfield coil consumed only about one-tenth ampere of the battery current, while the other competitors consumed about three-tenths ampere. Orders are flowing in to the company from all over the world.

blank dismay and that night they decided that this car had altogether too many parts, that it would be simply out of the question to ever remember the location of the thousand and one parts, and that, while they considered the car made of good material and well made, they would wait for a time until they could find a car made up of about one-quarter as many parts. The sale had been lost. Few users of automobiles ever stop to figure upon the necessary number of parts required, over 5,000 as a matter of fact, to make up an automobile. Fortunately once put together hundreds and hundreds of these parts never separate and few if any break in a good car. But the novice does not realize this.

The New York Motor Club is to go into larger and commodious quarters and a committee is seeking the new quarters now. The Hotel Cumberland acted as though it had a lease upon the club, and of late has benefited from an extraordinary large number of the members at luncheon, failing to appreciate that a few favors would hold the business. Some other hotel will now provide quarters, without a doubt, and be more reasonable. The club has not acted upon the question, but it is quite probable ere long that in view of his hard work, Secretary Tucker will be given a salary for his hard work. The membership is growing fast and the position of Secretary is no sinecure.

In the three establishments of A. G. Southworth, at 342 Flatbush avenue, 10 Clinton street and 811 Union street, respectively, Brooklyn has one of the best automobile concerns in the country. The magnitude of the business carried on at these three garages is not generally appreciated by the residents of that borough. The fireproof structure on Flatbush avenue is the largest of all, there being storage facilities there for 150 cars. The Clinton street branch will handle seventy-five machines, while the one on Union street, where all of the electrics are cared for, will shelter upward of fifty cars.

### Prevent Cruelty to Automobiles

The Society for the Prevention of Cruelty to Animals must soon have a counterpart in the automobile world—a Society for the Prevention of Cruelty to Automobiles. Men drive their cars without attention and keep on day after day until the car goes all to pieces, when they complain to the agent of the car that it is no good. Not one, but a score of stories could be told of the people who have run their car into the agencies and demanded that repairs be made when the car absolutely needed no other attention than a general overhauling. All

### Giving a Purchaser Too Much Information

It is not always safe to take a mere novice through an automobile factory to witness the manufacturing of a car. One prominent selling agent had an experience some days ago and now he waits until he has discovered whether a probable purchaser possesses in advance information regarding the true inwardness of an automobile. This particular selling agent was proud of his car, proud of the way it was made, and more than anxious to exhibit in the rough the fine material which went into its make up. He took his customers many miles by train, and when in the factory exhibited to them every little part of the machine, thousands and thousands of them, so it seemed. Each part was shown to be vital to a good car and when the day had been spent with still a great many parts not seen, as the agent explained, the customers looked at each other in



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# Graphite Lubricant

For Enclosed Transmission Gears

===== of =====

# MOTOR VEHICLES

Composed of kiln-dried soft cedar sawdust, Dixon's finely pulverized  
flake graphite and high-grade lubricants.

An ideal lubricant for Transmission Gears.

**Prevents Noise—Prevents Wear**

There is no leakage from gear case, and the longer it is used the  
better it is. Put up in convenient packages of one, five and  
ten pound cans. It is the only satisfactory lubri-  
cant for enclosed transmission gears.

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of this trouble might easily have been avoided by a little attention daily, but many motorists, especially those who either look after their cars themselves or do not look to their chauffeur, allow their cars to run until they are really cruel. No piece of machinery is so perfect that it does not need attention. Engines of great steamboats are looked after night and day, and yet steamboats have been run throughout a lifetime. Railroad engines are driven hardly over one hundred miles and are then taken to the roundhouse to be gone over. Factory engines receive constant attention. No automobile engine will ever be constructed which will require no attention. The millennium is not at hand and it will never be attained by any of us, that is certain.

The motorist who fails to give attention simply blames all of his trouble on the automobile, takes none himself, and then the agent gets it for recommending so poor a car. A good society with power to act might take a few of the careless

of 65,000 square feet in addition to the 240,000 square feet which we now have and will considerably increase our capacity."

Dudley E. Waters, is building a garage for the Lubeck Automobile Company, which was recently formed in Grand Rapids, Mich. The building is on Ionia street, just north of Lyon street, and is to be ready for occupancy by July. The company comprises E. M. Lubeck, William H. Gay and J. O. Carsens for the White steamer and the Olds machines.

The garage on the first floor of the Moyamensing building at Broad and Crosby streets, Chester, Pa., is practically ready for business. A quantity of constructive machinery has been installed and a number of automobiles have been noticed driving in for temporary shelter and attention. A pair of removable picket gates have been erected at the front of the building to keep out intruders.

The new garage in Pittsburg belonging to the Atlas Company will be among the finest in the country. The building is fireproof, contains three stories and a basement, and is equipped with electric fans, lights, ventilators and elevators. The company will have its own machine, paint and woodworking plant, rooms where chauffeurs can do their own repairs, and a charging plant.



LARGEST GARAGE BETWEEN NEW YORK AND BOSTON

owners into hand and teach them a lesson.

An automobile garage costing \$3,500 will be erected at the corner of Granby and Tenth streets, Norfolk, Va., by Messrs. Jordon & Davis, real estate dealers of this city. The building will be framed with galvanized iron covering. It will have 5,000 sq. ft. of floor space. A permit has been issued by the building inspector to J. M. Wolford to erect a brick addition to his property in York street. The improvements will cost \$3,500.

The Reo Motor Car Co. are erecting two new buildings to be 500 feet long and 65 feet wide. Each will have two stories.

They will extend in the same general direction as the other buildings and lie to the south of them. The contract has not been let, but it is expected that they will be finished before August 1.

"We need more room," said R. E. Olds. "This will provide floor space

The King of England has a fine assortment of automobiles in his garage, most of them being of British make. America has supplied only one, a Columbia electric, which is a great favorite with the Queen. It is the only automobile that Her Majesty ventures to operate.

The new Pittsfield auto garage in the Mills building, by the Douglas Andrews Company of New York, has been formerly opened and the dedication was attended by nearly every automobile enthusiast in the city besides a large number of others.

The new Hartford garage on Broadway and 88th Street is now open and in running order. President Hartford has arranged that cars sent there can have suspensions applied while the chauffeur waits, so that the use of the car is not lost for any considerable time.

## COMING EVENTS

June 26-27—Le Grand Prix, Sarthe Circuit, France.

June 28-29—Kiel (Germany) Motor Boat Races.

July 1—Maison Lafitte (France) Motor Boat Races.

July 3-7—Annual Endurance Run and Meet, Federation American Motorcyclists, Rochester, N. Y.

July 4—Tour to Rochester, N. Y., New York Motorcycle Club.

July 8—Le Coupé Dubonnet (France) Motor Boat Races.

July 8—International Cup Race for Motorcyclists, Cesky Club Motorcyclistu of Austria.

July 9—Toledo Yacht Club, Open Long Distance Race for Cruising Motor Boats, 119¼ miles.

July 12-28—Annual A. A. A. Tour, Chicago to Bretton Woods, N. H., Rules for the Glidden Trophy operative from Buffalo.

July 13-21—Annual Cruise American Power Boat Association, Port Washington, L. I., to Shelter Island, Stopping at Norwalk, Thimble Islands, New London, Newport and Block Island.

July 15—Suze-Mont Cenis Hill Climb (Italy). Automobile Club of Turin.

July 26-Aug. 15—Circuit Européen, 3,000 miles, Paris, Milan, Vienna, Berlin, Cologne, Paris (postponement probable).

Aug. 1-15—Circuit des Ardennes (Belgium).

Aug. 4—Buffalo Motor Boat Club, 15-Mile Race for Glasgow Cup, on Niagara River course.

Aug. 6—Motor Boat Race on the Rhone (France).

Aug. 9—British International Cup Motor Boat Race.

Aug. 9-12—Malchamps (France) Hill Climb Tests.

Aug. 14-19—Ostend (Belgium) Meet.

Aug. 15-16—Ventoux (France) Automobile Meeting.

Aug. 18—Liedekerke Cup Race.

Aug. 20-23—Ostende (Belgium) Motor Boat Races. Dover to Ostende.

Aug. 21-23—Gold Challenge Cup, American Power Boat Association, on St. Lawrence River at Chippewa Bay.

Aug. 23—Semmering Hill Climb.

Aug. 27-Sept. 2—Brescia (Italy) Automobile Meeting.

Sept. 2—100-Mile Road Race, on 25-Mile Circuit in Monroe County, N. Y. Rochester Automobile Club and New York State Automobile Association.

Sept. 3—Race Meet, Muskegon (Mich.) Motorcycle Club.

Sept. 3—Auvergne Cup Race, France.

Sept. 16—Juvisy (France) Motor Boat Meeting.

Sept. 22—American Elimination Trials for Vanderbilt Cup Race (Long Island Course Probable).

Sept. 27—Tourist Trophy Race, Isle of Man, A. C. of Great Britain.

Oct. 5-14—Leipzig (Germany) Exhibition, Krys-tall Palast.

Oct. 6—Vanderbilt Cup Race American Automobile Association.

Oct. 28—Gaillon (France) Hill Climb.

Nov. 1—New Zealand International Exhibition opens at Christchurch.

Nov. 1-16—Berlin (Germany) Automobile Exhibition.

Nov. 15-24—London Olympia Motor Show.

Nov. 23-Dec. 1—London, Stanley Show, Agricultural Hall.

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### The Massachusetts Automobile Law

Governor Guild, of Massachusetts, signed the new automobile law and it went into effect June 23. The speed limit is raised by the new measure to 20 miles on the highway, 12 miles in cities and towns and eight miles around curves or crossings, where the operator's view is obstructed. The law carries a provision that on the highway a car shall be timed for at least one-fourth of a mile when charged with overspeeding. This will prevent traps a few hundred feet long, such as many officials use. Many times a car might spurt up a little over the limit on a particular section, yet keep within the provisions of the law by a big margin by slowing up at various places. In the cities or towns the distance for evidence of speeding is set at an eighth of a mile.

The provision for imprisonment does not apply to speeding, as some of the motorists believe. Fines are fixed for exceeding the speed limit, but for reckless driving and for operating a car while under the influence of liquor fine or imprisonment, with a revocation of the license, is the penalty. The section that carries a provision that any person charged with violating the law shall be reported to the highway commissioner is still retained, and the provision curtailing the time allowed visitors from other States to drive here without registering their cars from 15 to 7 days was also passed. How this latter proviso is going to be carried is a problem.

The rights of towns and cities to make special speed regulations is protected to some extent, but not as fully as the officers of some of the towns hoped for. There is a provision allowing town or city governments to make special regulations. But there is a proviso curtailing the powers, for, if within 60 days the highway commission gets a petition or protest regarding the action of town or city officials, the new regulations are not valid until the highway commission approves of them. The new State law allows the towns or cities the privilege to increase the speed limit, but few, if any, towns will do that.

### Prosecuting Automobilists

"And what of the novice who purchases an automobile in these strenuous

times and desires at all times to be an upright citizen of the country, obeying all laws and escaping arrest?" The question seems vital, for every morning's paper cites instances of scores of arrests for illegal speeding. These, taken together with the protests of the drivers that they were not going faster than the law allows and the fact that a fine was paid or the prisoner appealed, creates a volume of what editors consider good news. Throughout the news it is apparent that the statements of the automobile driver count for nothing. The testimony of people riding in the car count for nothing as against the word of one policeman. Every automobilist is convicted of being a liar, the term is a hard one, before he goes before any judge. The feelings of the novice in automobiling to-day are not to be described in mere words.

A stranger to motoring and running

right into the path of automobiles, and the poor novice sees his doom.

Under police espionage and police persecution and with danger of some fool pedestrian running himself into danger, is it not remarkable that so many really enter the ranks? The automobile industry promises to be the leading industry of America, yet the authorities to-day seem anxious to check it in every way possible and the people, by their careless ways, are doing all in their power also to check it.

Ultimately there will be a solution of these problems, but just how this is to be brought about cannot be told to-day. Laws are being made to-day by cities, counties and States and the authorities spring new ones every day. The recent Harrison outrages are in mind, for in that city the judges enacted a law all of their own and against the opinion, it is said, of the city attorney. The police

themselves did not feel that they were in the right, but were forced to act, so one of them said. Under such circumstances the police acted in the dark and simply stopped every motorist and the judge fined everyone who came along, giving them no chance of a defence. Down on Long Island there are holdups every Sunday, and frequently on weekdays. Men not competent to time a hearse in transit to the ceme-

ttery aim to catch the time of a motorist by signaling, and for only a short distance, and their opinion is always taken for law as against the positive statement of the driver and the occupants of the car.

Undoubtedly motorists do go faster than the law allows, and such motorists should be apprehended and severely punished. But it would be well were the authorities to require competent timing, and this might be secured were the McMurry timing apparatus to be used for such timing. With this apparatus or something similar, there could not be an error in the recording of the actual time, and were the plan of the Chicago authorities to be followed and the number alone be taken of each offending car, that would be all sufficient. Summonses issued for the offending automobilist would bring quick response, and against the testimony of the timing instruments there could be no recall and no offsetting testimony.

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in a strange land, he drives along at a fair speed, and, as far as he knows himself, within the limits of the law. Of enjoyment that can be but little for him. His eyes are constantly on the road ahead, watching, watching, watching for the spy at the roadside. Every man passed is looked upon with suspicion. Traps are being watched for constantly. Well this man knows that if apprehended his word will count for naught. Authorities to-day figure upon every man as a criminal who operates a car.

Again the novice has read of accidents and his nerves are constantly on guard against these. The people themselves bring about four of five accidents, but the motorist is always to blame according to nine of ten reports. And as a matter of fact the people do not pay attention to the roads, and when the accidents occur always blame the motorist for their trouble. People step off into the road without a glance either to the left or the right. Countless people step



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Birmingham, Van Dusen Motor Car Co.  
Mobile, Mobile Motor Car Co.

#### CALIFORNIA.

Los Angeles, Auto Machine & Garage Co., 631 San Pedro St.  
Los Angeles, Burke Bros., 485 S. Spring St.  
Oakland, Bennet's Auto Garage.  
Oakland, S. C. Myers, 513 16th St.  
Sacramento, Jos. J. Schneer, 1009 No. J. St.  
San Francisco, Boesch Lamp Co., 1569 Grove St.  
San Francisco, Central Bank Auto Garage, 1185 Market St.

#### COLORADO.

Colorado Springs, Colorado Springs Garage Co.  
Colorado Springs, Miller & Wilson Auto Co., 122 N. Cascade Ave.  
Denver, Automobile & Repair Co., 1640 Broadway.  
Denver, O. Burke, 918 Larimer St.

#### CONNECTICUT.

Bantam, Bantam Anti-Friction Co. (First-Class Repair Station.)  
Bridgeport, Bridgeport Automobile Co.  
Bridgeport, T. R. Aston, 1103 State St.  
Bridgeport, Park City Auto Station, 625 State St.  
Greenwich, Allen Asten & Co.  
Hartford, Brown, Thompson & Co., Main St.  
Hartford, The Miner Garage Co., Cor. High and Allyn Streets.  
New Britain, Corbin Motor Vehicle Co., Myrtle Ave. and High St.  
New Haven, D. H. Buell & Co., 516 State St.

#### DELAWARE.

Wilmington, T. C. Bradford, 311 Market St.

#### DISTRICT OF COLUMBIA.

Washington, National Capitol Auto Co., 1120 18th St., N. W.

#### FLORIDA.

Jacksonville, East Coast Auto Co., 18 Ocean St.  
Jacksonville, Fred. E. Gilbert, 27 W. Forsyth St.

#### GEORGIA.

Atlanta, Augusta Garage Co., 51 Broad St.  
Savannah, C. H. Leopold, 444 Dayton St.  
Savannah, G. W. Thomas, 114 Jefferson St.

#### ILLINOIS.

Chicago, A. C. Banker Auto Co., 35th St. and Grand Blvd.  
Chicago, Carpenter & Volkhardt, 2955 Indiana Ave.  
Chicago, T. H. Cranston & Co., 58 Wabash Ave.

#### INDIANA.

Indianapolis, Auto Storage & Repair Co., 23 E. Ohio St.  
Indianapolis, Carmon & Fryer, 330 E. Market St.  
Muncie, Muncie Auto Garage & Repair Co., 209 E. Adams St.

#### IOWA.

Cedar Rapids, Cedar Rapids Supply Co., 307 3d Ave.  
Des Moines, Iowa Brass & Nov. Works Co., 117 Grand Ave.

#### KANSAS.

Topeka, Kenwood Garage, 111 E. 7th St.

#### KENTUCKY.

Louisville, R. L. Davis, 1003 W. Chestnut St.

#### MAINE.

Portland, Allen Motor Car Co.  
Portland, Congress Sq. Auto Station, 18 Forest Ave.  
Portland, Maine Motor Carriage Co.

#### MARYLAND.

Baltimore, Auto Storage & Repair Co., 1118 Cathedral St.  
Baltimore, Balto. Motor Car Co., 327 N. Calvert St.

#### MASSACHUSETTS.

Brockton, Geo. J. Donahue, 1135 Main St.  
Lynn, Y. C. Der Bar, Broad St.  
Pittsfield, Central Automobile Station Co., Renne Ave. & Pearl St., Telephone 161-11.  
Pittsfield, Pittsfield Auto Garage, 328 North St., Telephone 15.  
Waltham, Watch City Auto Co., Music Hall Ave.  
Worcester, Worcester Auto Co., 30 Exchange St.  
Worcester, Bean & Hanson, 671 Main St.

#### MICHIGAN.

Bay City, H. T. Fenner, The Ridotto.  
Detroit, Berg & Brehmer, 238 Jefferson Ave.  
Detroit, Detroit Automobile Top Co., 265 Jefferson Ave.  
Lansing, John Bohnet, 117 Lenawee St., E.  
Saginaw, Morris Auto Co., Tilden St. and Genesee Ave.

#### MINNESOTA.

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St. Paul, Bird Burney Auto Co., Washington and 5th Sts.

#### MISSOURI.

Kansas City, E. P. Moriarty & Co., 1000 Grand Ave.  
Kansas City, Day Auto Co., 1407 S. 22th St.  
St. Louis, Olive Auto Co., 3970 Olive St.  
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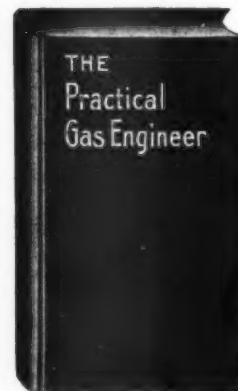
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Bloomfield, Albert Loppacker, Glenwood Ave. and Henry St.  
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Elizabeth, Elizabeth Auto Co., 14 Westfield Ave.  
Englewood, J. W. Van Wart, Palisade Ave.  
Englewood, W. P. Varley.  
Freehold, Hotel American.  
Hackensack, Hackensack Auto Co.  
Hackensack, North Jersey Auto & Eng. Co.  
Jersey City, Crescent Cycle & Automobile Co., 2565 Hudson Bl'vd.  
Jersey City, S. W. J. Kells Mfg. Co., 130 Highland Ave.  
Long Branch, W. H. Parker & Co., 148 B'way.  
Montclair, Montclair Auto Station Co., Valley Road.  
Newark, Newark Garage & Repair Co., Clinton Ave. and Somerset St.  
Newark, Motor Car Co. of New Jersey, 291 Halsey St.  
Newark, Frank Boland Auto Co., 233 Halsey St.  
Newark, Coburn & Beldon, C Central Ave.  
Newark, Astor Garage, 56 Sherman Ave.  
Passaic, Geo. Brown.  
Passaic, Passaic Motor Car Co., 147-151 Main Ave.  
Passaic, Soule & Pearl, 161 Main Ave.  
Paterson, Brown & Schmidt, 199 Paterson St.  
Summit, Chester & Henry.  
Trenton, Franz Milton Co., 30 W. State St.  
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Albany, Ernest A. Norris, 325 Central Ave.  
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Ithaca, Fairbanks Grant Mfg. Co., 109 Albany St.  
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New York City, Automobile Arcade, B'way and 49th St.  
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Rochester, Fred A. Mabbett, 189 Main St., West.  
Syracuse, The Amos-Pierce Auto Co., 109-113 So. State St.

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Charlotte, L. Barringer, 10 N. Church St.

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Cleveland, H. S. Moore 160 Crawford Rd.  
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Dalton, Kellogg Mosier & Co.  
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Easton, Fischer Auto Storage Co., 219 Ferry St.  
Easton, Lon Crane.  
Easton, C. F. Hill, 327 Ferry St.  
E. Downingtown, Griffith & Wollerton.  
Erie, Bay State Machine Co., 121 Peach St.  
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McKeesport, Sam'l Leek, 9th Ave. and Mulberry.  
Philadelphia, Bellevue Stratford Garage.  
Philadelphia, 51st St. Auto Station, 51st St. and Beaumont Ave.  
Philadelphia, D. L. Mulford, 1801 N. 21st St.  
Pittsburg, Auto Traffic Co., 6101 Penna. Ave.  
Pittsburg, Atlas Automobile Co., 6235 Penna. Ave.  
Pittsburg, A. Engle, 1103 Carson St., S. Side.  
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Pittsburg, The Homewood Auto Co., 1750 Kelley St.  
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Reading, Chas. A. Miller, 33 Wood St.  
Scranton, R. W. Whipple, 529 Spruce St.  
Stroudsburg, G. H. Schroeder.  
Wilkes-Barre, Wilkes-Barre Auto Co., 23 N. Franklin St.  
Wilkes-Barre Auto Machine & Repair Co., 35 N. Washington St.  
Wilkes-Barre, R. Johnson, 12 N. Main St.  
York, J. A. Walker.

**RHODE ISLAND.**

Narragansett Pier, Church & Caswell.  
Newport, N. Y. Auto Repository, Ocean House Stables.  
Newport, J. D. Dickson, 113 Bellevue Ave.  
Providence, Philip Shaw, Reservoir Ave.

**TENNESSEE.**

Nashville, Anderson Auto Co., 314 4th Ave. N.  
Nashville, B. T. Bell, 166 3d Ave. N.

**VERMONT.**

Rutland, Clark & Mathews, 161 West St.

**WISCONSIN.**

Milwaukee, C. G. Norton & Co., 459 B'way.  
Milwaukee, Hein & Casper, 501 B'way.  
Milwaukee, Welch-Estberg Co., Seventh and Grand Ave.

**DOMINION OF CANADA.**

Winnipeg, McCulloch & Rosewell, 189 Lombard St.  
Winnipeg, Jos. Maw & Co., 287 Williams St.

**WE ARE THE OLDEST****Automobile House in the U. S.**

Exceptional bargains in second-hand Packard-Winton gasoline cars, Waverly, Columbia electric. Write us.

**Rochester Automobile Company**  
JOS. J. MANDERY, Prop. **Rochester, N. Y.**

**Intending Purchasers**

of Automobiles by consulting with our mechanical experts before buying will save trouble and expense.

**Automobile Listing and Inspection Co.,**

62 William Street, New York

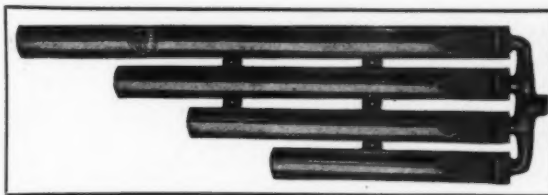
J. S. HELLER, Manager

**ALUMINUM BODIES****J. M. QUINBY & CO.**

EST. 1834

Carriage Builders. **NEWARK, N. J.**

# GABRIEL HORN



Ride in an automobile with a driver who blows a discordant, shrieking bulb horn as a warning, then ride with one who uses a melodious **Gabriel Horn**, and note the difference in the results obtained.

Pedestrians heed the warning of the former, but its shriek annoys, and angers them. A **Gabriel** warning is just as effective, but its pleasant, agreeable notes add a sort of "if you please" effect to its demand for room that makes it a request.

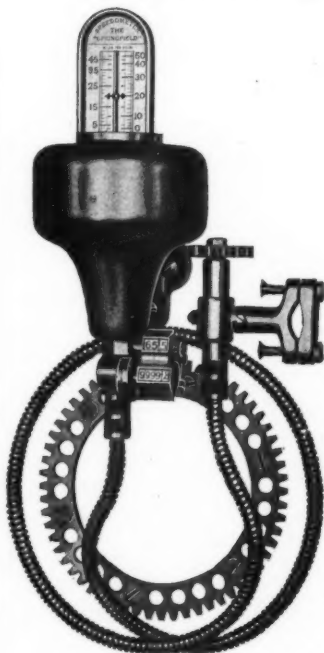
Bear in mind that **Gabriel Horns** are always ready for use—nothing to break or get out of order. Ask for Booklet.

**GABRIEL HORN MFG. CO.** 980 HAMILTON STREET  
CLEVELAND, OHIO

## THE SPEEDOMETER OF THE SEASON OF 1906

# "The Springfield"

IT HAS MADE A GREAT HIT  
and now speaks for itself on  
cars in all parts of the country



This cut shows the instrument and all its fittings. It attaches to the dashboard by a jointed bracket, is driven by the gear shown, from either front wheel, by means of a double jacketed flexible shaft, the pinion bracket of which is universal and will fit to the steering knuckle arm of any American built car.

This instrument will tell HOW FAST you are going, HOW FAR on each trip and HOW MANY MILES your car goes the whole season. Its dial is self-luminous and can be read after dark. Its accuracy at every mile is guaranteed. Its is designed and constructed for long service. Balanced motions, hardened steel parts, self-lubricating throughout, water and dust proof; at twice the price it could be no better. All material and workmanship are the best. It is sold at only a fair margin of profit. Price for any size wheel with complete fittings.

50 Mile Combination Instrument.....\$45.00	80 Mile Combination Instrument.....\$55.00
50 Mile without Odometer.....35.00	80 Mile without Odometer.....45.00

Patented in United States October 10, 1905. Patented in Canada, England and Europe. Other patents pending.

Manufactured by

**THE R. H. SMITH MFG. CO.,** SPRINGFIELD, MASS.

Established 1865 Incorporated 1883



## How Soon Can We Launch One for You?

One of our new 35 feet Torpedo Stern Speed Launches. Just the thing you have been looking for. We are prepared to furnish anything in motor boats from patterns and set up frames to completed boats at reasonable prices. Write us for full information.

**Niagara Motor Boat Co., No. Tonawanda, N. Y.** Factory, 150 Sweeney St., on Niagara Falls trolley line.





*Encircled by the mountain peaks and surrounded by the fragrant spruce and balsam forests of the "New Hampshire North Woods," with cold and sparkling mountain streams and springs of purest water.*

**BRETTON WOODS** offers health, vigor, and delight from the time of summer's earliest green until the last tint of autumn's gold and crimson

ITS GREAT HOSTELRIES

**The Mount Pleasant and The Mount Washington** will provide every comfort and luxury that the traveler may require.

**Annual Tournament of the Bretton Woods Golf Club, the first week in August**

*Anderson & Price, Managers*

*Bretton Woods :: :: :: :: New Hampshire*

*Also of the Ormond and Bretton-Inn-at-Ormond Beach*

*New York Hotels, Bretton Hall, 86th Street and Broadway,*

*(Subway Station), and Hotel Seymour, 50 West 45th Street*

*Through trains from Boston and New York, morning and night, to station upon hotel grounds*

## If You Advertise Corsets

you can't sell them to manufacturers, and we don't ask you and wouldn't let you advertise them in

## American Industries

(Official Organ National Association of Manufacturers)

This paper has had a wonderful success in one particular field—advertising goods (and service) where the wish is to reach especially prosperous men in general, and the heads of manufacturing concerns in particular. Advertisers tell us of great results.

I should be very glad to send you proofs of this, and rates if you are interested.

**ADVERTISING MANAGER, American Industries,**

816 Maiden Lane Bldg., New York City







# Leon Rubay



**LACOSTE COILS**

**BRANCHES**

**BOSTON**  
Leon Rubay  
226 Columbus Ave.

**NEW ENGLAND**  
Michelin Tire Agency

**PHILADELPHIA**  
Robert H. MacKinney  
1437 Vine St.



**BRANCHES**

**CHICAGO**  
Franco-Amer. Auto  
Supply Co.  
1406 Michigan Ave.

**CALIFORNIA**  
Western Motor Car  
Company  
Los Angeles

**LÉON RUBAY, 140 W. 38th St., New York City**

# IMPROVED TRUFFAULT-HARTFORD SHOCK ABSORBER TRADE MARK

**Increases the speed and prevents lost traction.**

**Obviates the necessity of slowing down for obstructions.**

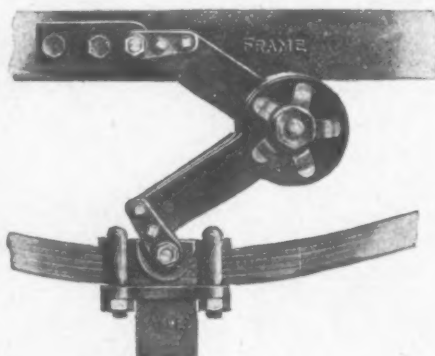
**Absolutely prevents breaking of springs.**

The Truffault-Hartford may cost a little more than the numerous imitations and experiments, but when every test has proven its superiority does it pay to buy anything but the best? Ninety-five per cent. of all Shock Absorbers in use are Truffault-Hartford.

**Self-adjusting—Requires no attention. Makes the car ride like a baby carriage. Wears longest.**

*Adopted by the Pierce Great Arrow, Locomobile, Matheson, Richard-Brasier, Peugeot, Napier, Gobron-Brillié, Studebaker Aerocar.*

## IMMEDIATE DELIVERIES



**Cars under 1500 lbs., \$40.00 (Four Suspensions)**

**Cars over 1500 lbs., \$60.00 (Four Suspensions)**

## WARNING

We are the owners of the fundamental patents entirely covering every practicable form of frictional retarding devices for vehicle springs, and hereby warn the trade from handling any infringing device that may be offered for sale. We also warn the trade against the use of the term "SHOCK ABSORBER," which is our trademark.

## HARTFORD SUSPENSION CO

E. V. HARTFORD, Pres.

67 Vestry Street, New York

We are Sole American Agents for the Celebrated  
**GOBRON-BRILLIÉ**  
"The Finest Automobile in the World."



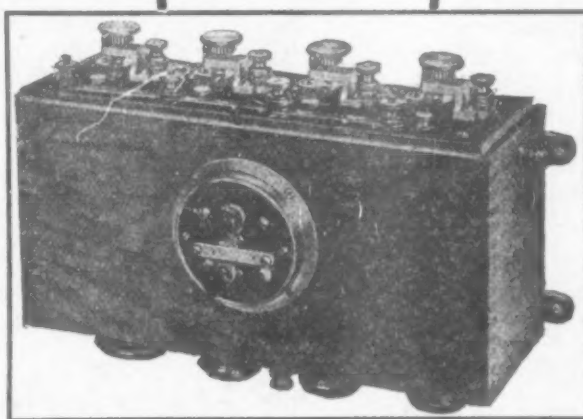
USE COL. SPRAGUE'S AUTO TOPS.

THE SPRAGUE IDEA      MADE THE SPRAGUE WAY  
**COLONEL SPRAGUE'S FOLDING PLATE GLASS FRONT**  
 THIS SHOWS THE INSIDE WITH THE FRONT FOLDED DOWN AND LOCKED. - IT IS HELD SECURELY AND CANNOT RATTLE. - TO FOLD THE FRONT UP, TURN THE LOCKS AND RAISE THE UPPER SECTION AND LOCK IT. - IT GIVES YOU PLENTY OF AIR WHEN FOLDED DOWN. - IT PROTECTS YOU FROM THE WIND AND FROM FLIES AND BUGS WHEN FOLDED UP. - IT GOES NICELY WITH A SPRAGUE TOP. - IT CAN BE FITTED TO ANY CAR.

ASK FOR CATALOGUE  
**THE SPRAGUE UMBRELLA CO.**  
 NORWALK, OHIO.

## Splitdorf Ignition Apparatus

THE LEADER  
 WHERE QUALITY IS  
 ALWAYS THE  
 MAIN  
 CONSIDERATION  
 THE PRIZE  
 WINNERS ARE  
 INVARIABLY  
 EQUIPPED WITH  
 OUR COMPLETE  
 APPARATUS



MADE OF  
 THE  
 BEST PROCURABLE  
 MATERIALS  
 AND  
 WITH THE  
 SAME  
 CAREFUL  
 DETAIL AS  
 A  
 WATCH

Our Ball Bearing Commutators, Spark Plugs, High and Low Tension Magnetos, Switches, Cable, etc., will interest you.

**C. F. Splitdorf,** 17-27 Vandewater St., New York, N. Y.



## A tire locked to the rim as is A FISK TIRE

represents a Life Preserving Principle, and Reduces Tire Maintenance to an Economic Basis.

Beads of a wedge shape are applied to a flat rim and held by rings which are rolled on an angle corresponding to that of the bead, so that when drawn down by clamping bolts, the bead acts as an inside cone wedge, with the result that the tire is firmly held to the rim, without air pressure or circumferential contraction.

Such a construction should readily appeal to any discriminating buyer.

Write for further particulars in printed form.

**THE FISK RUBBER COMPANY,**  
Chicopee Falls, Mass.



## The AUTOMOBILE MAGAZINE is devoted to helping Automobilists



**Automobile Press**  
136 LIBERTY ST., NEW YORK

¶ It tries by the use of plain language to explain to automobilists the principles of automobile construction.

¶ It gives numerous examples of how automobilists were worsted by trifling defects and explains how readily they could have been adjusted.

¶ It stands for a square deal between automobilists and other road users.

¶ It preaches that the senseless, reckless scorcher is the worst enemy of all who use automobiles for business and pleasure.

¶ It is trying to cultivate a sound public sentiment in favor of good roads.

¶ It holds that garage owners are as fair and honest as other tradesmen.

¶ It gives forth the kind of common sense, practical information good for automobilists to hold in their heads.

¶ It has followed the policy of sending the magazine only to the people who pay for it, and it has the largest paid circulation in the automobile field.

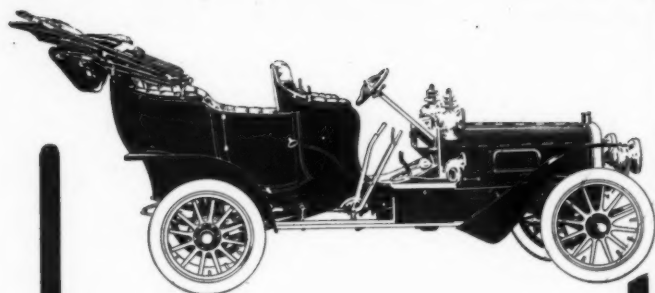
¶ It goes to the class of people who buy automobiles and automobile accessories.

¶ It is therefore an excellent advertising medium.









## FORD 6-CYLINDER

PRICE \$2500.00

**HINDSIGHT** is a talent all men possess.

**FORESIGHT** is the gift of the few.

95 per cent. of all the men who engage in business fail sooner or later—the 5 per cent survivors are gifted with foresight.

**HAD YOU NOTICED** that several prominent builders of 4-Cylinder touring cars have announced that they will rely on a 6-Cylinder car for their chances of success in the Vanderbilt Cup Trials? Funny, isn't it? If all the manufacturers who are now designing—or who have built and are actually trying out 6-Cylinder Models for next year were to admit that fact—what a time they would have to clear out their present models!

**JUST BETWEEN OURSELVES** we cannot quite differentiate between down-right dishonesty and this exploiting of features that the advertiser has already decided to discard next season. We may be a trifle finicky about these things—but that's our way.

**TWO YEARS AGO** Henry Ford realized the superiority of the 6-Cylinder motor—that's **FORD** foresight. Other manufacturers agreed that the wonderful flexibility and power, and the total lack of vibration in this type of motor, made it ideal for automobile propulsion. But they believed the public would not appreciate it yet; that's fatal hindsight.

**BUT WHAT'S THE USE**—no words can express the qualities of the 6-Cylinder motor as it expresses itself.

A DEMONSTRATION IS A REVELATION

## Ford Motor Company

Detroit, Mich.

Member

American

Motor Car

Manufacturers'

Association,

Chicago

### BRANCHES

147-149-151-153 Columbus Ave., Boston

1721-23 Broadway, New York

727 Main St., Buffalo

Broad and Buttonwood Sts., Philadelphia

1444 Michigan Ave., Chicago

1913 S. E. Euclid Ave., Cleveland

and 318-320 E. 11th St., Kansas City

Canadian Trade Supplied by

FORD MOTOR COMPANY OF CANADA, Ltd.

WALKERVILLE, ONTARIO

### COMPLETE LISTS

## Auto Owners Garages ::::

DEALERS, JOBBERS  
and MANUFACTURERS

New Names, Daily, Weekly or  
Monthly

MOTOR DIRECTORIES CO., Inc.

SUCCESSORS TO

AUTO DIRECTORIES CO.

108 Fulton St.,

New York City

'PHONE, 497 JOHN

It's  
Really  
Such  
a  
Practical  
House



## Auto Houses of Perfection

Premiers are the perfected ones. Artistic in appearance—sensible in use. As you must have an auto house, why not have the best? One that will look nice—one that can be erected in two hours, and is easy to move and re-erect—one, in fact, that is just as durable as a permanent structure, at about a third the cost. If this describes what you are looking for, get further information.

Write for booklet No. 71-31 at once.

CHAS. H. MANLEY

PREMIER MFG. WORKS

ST. JOHNS, MICH.

### How the Continental Tire People Treat Their Help

The Continental, Caoutchouc & Gutta Percha Company, Hanover, Germany, have displayed extraordinary interest in promoting the interests of their employees. One form of this benevolence has been manifested in the building of houses which are rented at very low rates.

Although the number of newly built houses, which were opened for occupancy on April 6, 1905, in the presence of quite a number of government and

city representatives, is rather small in comparison to the great number of industrious and loyal employees of this concern, there is plenty of space for further improvements and additional buildings.

The whole area comprises 51,159 square feet, the cost of which is \$103,000. By decision of the Board of Directors at the meeting of May 16, 1904, \$160,000 were reserved for the erection of the buildings thereon so that so far \$263,000 have been invested.

The block of houses reproduced in the

picture attached hereto, contains 83 apartments, which are divided as follows:

Eight houses for workingmen with 8 apartments each.

Two houses for foremen with 4 apartments each.

One house for foremen with 7 apartments.

One house for higher employees with 4 apartments.

The house for foremen also contains a library (about 1,000 volumes) with two reading rooms. The rent for a flat

in the houses of workingmen consisting of three rooms, amounts to \$50 to 70 per annum.

Flat for foremen, 4 rooms, \$75 to \$100 per annum.

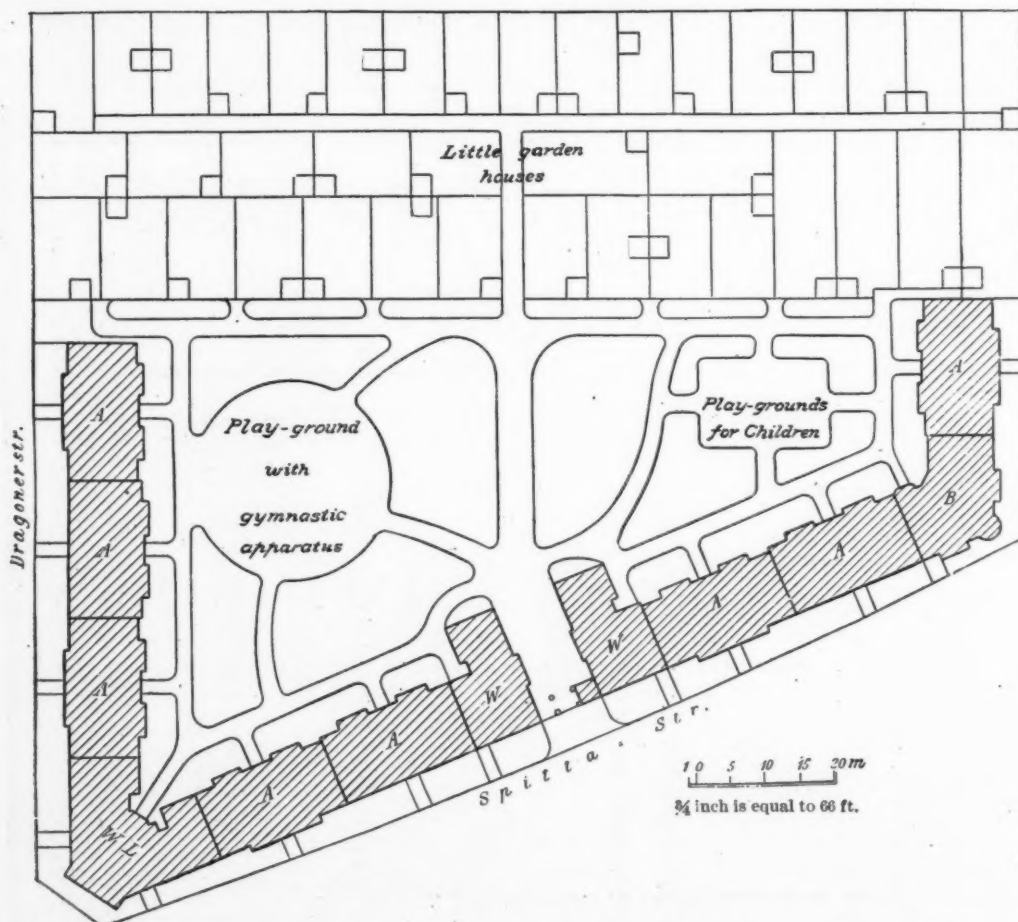
Flat for higher employees, 5 rooms, \$100 to \$125 per annum. The amounts collected for rents interests the invested capital to about 2.1 per cent. The cost arising for beautifying, repairs, taxes and depreciation is covered by the company. To every one of these dwellings belongs a spacious kitchen (about 60 square feet), a large veranda (10 square feet), a cellar and an attic.

In order to get suitable and good plans a prize was offered to the architects of Hanover, and in order to avoid the monotonous impression of street fronts, the architects, by using various kinds of material and other manipulations, essential in beautifying house fronts, etc., succeeded so remarkably well that the general view of this whole complex gives a special aspect to that part of the city in which the houses are located.

Each house has its garden in front (16-17 square feet wide) with fence of iron and wood, and the remainder of the ground (at present (Cont'd on page 68))



HOUSES FOR WORKMEN OF C., C. & G. P. COMPANY



CONTINENTAL, CAOUTCHOUC & GUTTA PERCHA COMPANY'S PLAN OF HOUSES FOR WORKMEN

## The Broadway-Vendome Hotel



Broadway and 41st Street, New York

European Plan; Absolutely Fire-proof; a First-class Hotel, at moderate prices; Subway Station, one block; Grand Central Station, 5 minutes walk; City Hall, eight minutes; Lower Section, eight minutes; within two blocks of fifteen prominent theatres, centre of shopping district.

Single Rooms, near Bath, \$1.50 Per Day  
Single Rooms, with Bath, \$2.00 Per Day

Send For Booklet

**BROADWAY VENDOME COMPANY**

Proprietor

E. S. CROWELL

Gen'l Manager

## THE ST. JOHN RUBBER CUSHIONED AUTO TIRE

THE GREATEST TIRE MAN'S



INGENUITY EVER PRODUCED

The  
Tire which  
Aroused so much  
Interest at the  
Automobile  
Shows

### THE HAPPY MEDIUM

The Tire that solves the vexing problem now presented to both manufacturers and private owners of automobiles, i. e.: Tire Troubles Cannot Puncture, Perfect Resiliency Saves one-third the power now used with other tires. Fits Single or Clincher Rims and easily applied. Adopt our Tire, save annoyance and expense.

Write for our 1906 Catalogue, Testimonials, etc.

**St. John Rubber Tire Company, Inc.**

AUTOMOBILE AND CYCLE TIRE MANUFACTURERS

Tel. 1487 Broad.

116 Broad Street, New York

#### AGENTS:

New York. General Auto Supply Co., 1663 Broadway,

Philadelphia, Pa. G. W. Nock, 126 N. 4th St.

Washington, D. C. H. T. Jones & Co., 602 E St., N. W.

Boston, Mass. The Geo. W. Knowlton Rubber Co.

Buffalo, N. Y. The Buffalo Mill & Supply Co., 210 Main St.

Detroit, Mich. The Auto Accessories Co., 265 Jefferson Ave.

San Francisco, Cal. Percy & Brown, 403 Van Ness Ave.

# The Information Bureau OF THE Automobile Magazine

136 LIBERTY ST.

NEW YORK CITY



**UNDERTAKES** to give reliable advice concerning every question relating to automobiles. We are constantly in receipt of questions about what make or type of automobile is best adapted for certain conditions of service, and we always give help that is valuable. We also give advice as to methods of overcoming troubles with motor cars of every description. This advice is given free to our readers.





### Good Deeds of Automobiles

In the news of every day as we read it in the daily papers we learn of the good deeds of the auto as well as the bad deeds. In a late paper we read with interest of the successful use of an automobile in aiding in putting out a fire on Long Island. The country place of Howard J. Dietz, near Hempstead, L. I., had caught fire and an automobile carried the members of the Meadowbrook Hunt set to the fire where they did noble work in the saving of property, and, undoubtedly, of life. Mr. Dietz, himself, drove his car for help, and with his auto pulled the hose cart to his place. The car he filled with men, and there were men seated on the hood, over twenty men hanging to every point of vantage. The automobile saved the day in this instance as it has done in so many others. Yet there are men who decry automobiling as a fad.

### Went Through a Stone Fence

Accidents will happen, and no one knows better than an owner of an automobile that there are accidents which cannot sometimes be avoided. Alden McMurtry, of the New York Motor Car Co., and his father were about to sit down to dinner at their Fifth Avenue home when a jar shook the house. Upon reaching the front door they found an automobile in the front yard. This machine had balked, skidded, and the occupants had been compelled to go through a stone fence and into the yard with the machine. They were very contrite and not a little surprised when the Messrs. McMurtry informed them that there would be no damages. Both realized that men were not going to do such things providing they could be avoided. They had driven cars themselves just a few.

### Orphans' Day Parade

May day parties and June walks are overshadowed by the Orphans' Day parade instituted by Gen. John T. Cutting. One hundred and twenty-five touring automobiles with a sore of sightseeing 'busses were filled to overflowing one lovely morning in June, and proceeded from upper Broadway, New York, to Dreamland, Coney Island. However chequered may have been the history of that throng of early orphans, they were all smiles and rosy cheeks, and red, white and blue ribbons. It would be difficult to say who was the "queen rose in that rosebud garden of girls," or who was the handsomest boy in that glad galaxy of youth and beauty. The girls looked like fairies, and each particular boy was happier than the King of Spain. We doubt if a more delighted party ever had a more joyful day. The drive through the city was like a triumphal progress. It was Dreamland all the time with the happy orphans. General Cut-

ting sets an example which we hope other automobile enthusiasts will imitate. Thousands are rising up and calling him blessed.

### Sneaking Out of Responsibility

John C. Rogers, Jr., contests his indictment in the New Rochelle accident, in which two aged ladies were killed. He says that only the chauffeur was responsible. Now, Mr. Rogers was in the automobile. It is alleged to have been his property. As owner and employer he was responsible for the speed of the machine as much as would have been the case had he been back of the wheel himself. Providing the chauffeur was going faster than was safe, the orders of Mr. Rogers would easily have checked him. There is no testimony that such orders were given. The contention of Mr. Rogers that he was seated back

broken arms or wrists. Cranking the motor seems practically impossible to a woman, and the fair sex is oftentimes kept from operating a motor car by the difficulties of starting the motor. By introducing the Ever-ready starter, F. J. Alvin provides the automobile world with an escape from trouble and opens the field of motoring to the fair sex. With this starter it is possible for men and women to step right into the car, press a foot lever releasing the spring and start. The motor starts and should it fail there is necessary only rewinding of the spring. Could anything be simpler? And the engine once started winds up the spring ready for the next time. Oftentimes a motor is allowed to run for hours because cranky in starting. The Ever-ready starter saves the wear and tear on machinery, saves gasoline and oil, saves overheating and, in fact,



OUTDOOR AUTOMOBILE SHOW. TENT TO RIGHT

of the chauffeur, and that he did not, therefore, know of the speed which was being made, does not clear him, for no man travels at forty miles an hour in an automobile, as testimony is said to prove Mr. Rogers was traveling, without knowledge of law breaking. The outcome of this lamentable accident will be watched with much interest. Many believe that Mr. Rogers was rightfully held together with his chauffeur, and many believe that other owners should be indicted in common with the man they hire and whose acts must be the acts of the owner, providing he be competent and obedient as every chauffeur is supposed to be.

### The Power Starter

Does anyone stop to consider the boon to automobiling created by the Ever-ready starter? Cranking an automobile is a dangerous operation for a man, as is attested by many seen with badly battered countenances or many others with

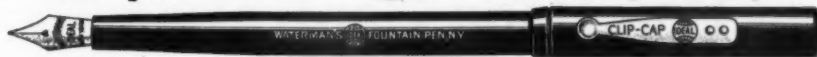
saves a lot of money in a season. It also saves many cuss words, robbing motoring of one of its leading features.

"Ever-ready" F. J. Alvin said at Boston, "We have orders for hundreds this year and thousands next year, for lots of makers are going to fit them regularly to their models. The demand this year promises to exceed the supply, for it is growing daily."

The writer has always been in favor of the establishing of standard sizes and forms for all kinds of machinery. Having expressed these views to Mr. Charles E. Duryea, he received the following reply: "I believe that diversity of style should be encouraged. Standardization stops progress. When anything becomes standard it is sold on its price and without advertising. You newspaper people are not interested in this condition. Specialization permits the highest development. Every manufacturer ought to push his own individual style."

# Waterman's Ideal Fountain Pen

The pen with the Clip-Cap



Miss Dip-no-more

goes to the shore

Where "Phoebe Snow"

can seldom go.

(With apologies to the road of Anthracite.)



## (1) Planning



Miss Dip-no-more  
Health to restore  
Begins to plan  
Vacation's span  
To mark the trend  
Of journey's end  
She takes in hand  
Her Waterman.

## (2) Packing



While her maid wraps  
Up all her traps  
Miss Dip-no-more  
Upon the floor  
Takes cognizance  
Of all her wants  
Glance will reveal  
The pen Ideal.

## (3) Leaving



At her command  
The station man  
Takes out his pen  
And there and then  
With greatest ease  
(This lady sees)  
Her ticket writes  
For shore delights.

## (4) Arriving



Miss Dip-no-more  
Has reached the shore  
From there she sends  
To at-home friends  
Postal card notes  
There-to provoked  
By that good friend  
Her fountain pen.

## FOR YOUR VACATION

a genuine. ¶ At no time does one feel the need of a writing instrument that combines both pen and ink so much as when away from one's usual haunts. ¶ Waterman's Ideal Fountain Pen has the Spoon Feed that absolutely prevents flooding and secures a constant even flow. This feed has made it the standard of the world. ¶ Every man should have a pen with a Clip Cap. Every woman should carry a pen in a chatelaine holder, as shown in the illustration above. ¶ May be procured from all good dealers.

L. E. Waterman Co., 173 Broadway, New York

8 School St., Boston  
209 State St., Chicago

961 Broadway, Oakland, Cal.  
136 St. James St., Montreal

\*Clip Cap  
Holder  
Gold Mounted  
Closed  
No. 12... \$2.50  
No. 13... 4.50  
No. 14... 5.00  
No. 15... 6.00  
No. 16... 7.00  
No. 17... 8.00

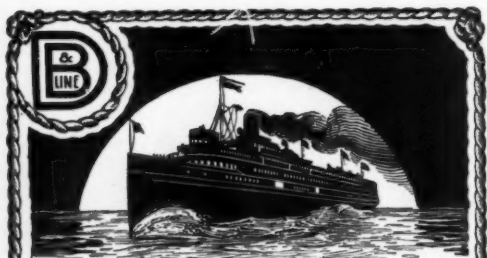
\*Clip Cap  
Holder  
Silver Filled  
with  
Nomenclature  
No. 12... \$2.50  
No. 13... 4.50  
No. 14... 5.00  
No. 15... 6.00  
No. 16... 7.00  
No. 17... 8.00

## One Hand Control and Safety

With the **DURYEA** single lever control the car can be slowed down, accelerated or turned **INSTANTANEOUSLY**. With any other arrangement even half a second's time reaching for a lever may mean an accident. **DURYEA** steering connections are all double; there is no chance of accident from a broken steering connection. The **DURYEA** steering pivot gives the same result as an ordinary caster, so that road shocks have absolutely no effect on the steering lever. A front wheel can be driven over a brick at 5 or at 50 miles an hour and the course of the car will not be deflected **in the slightest**, even with the hand off the steering lever, thus absolutely proving perfect steering.

**The fastest car in the world (over 2 miles a minute at Ormond) was steered by a lever, NOT by a wheel.**

**Duryea Power Co.,** 30 C Street,  
Reading, Pa.



### Across Lake Erie — BETWEEN — TWILIGHT AND DAWN

The D. & B. Line Steamers leave Detroit weekdays at 5:00 p. m., Sundays at 4:00 p. m. (central time) and from Buffalo daily at 5:30 p. m. (eastern time) reaching their destination the next morning. Direct connections with early morning trains. Superior service and lowest rates between eastern and western states.

#### Rail Tickets Available on Steamers

All classes of tickets sold reading via Michigan Central, Wabash and Grand Trunk railways between Detroit and Buffalo in either direction will be accepted for transportation on D. & B. Line Steamers.

Send two cent stamp for illustrated pamphlet. Address, A. A. Schantz, G. S. & P. T. M., Detroit, Mich.

**DETROIT & BUFFALO STEAMBOAT CO.**

### The Most Interesting Touring Territory in — AMERICA —

## Long Island

"Where Cooling Breezes Blow"

Six Hundred Miles of Improved Highways.  
Rolling Hills and Shadeu Roadways along the Sound.

Beautiful Beaches and easy running beside the Sea.  
Quaint Villages and Superb Estates.

In touch with New York City by train, telegraph and telephone.

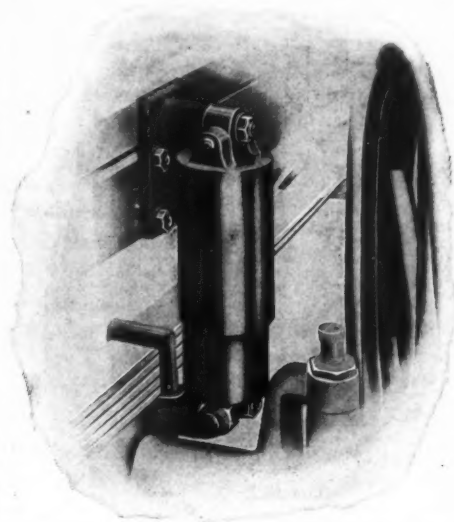
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**LONG ISLAND**, a handsomely illustrated descriptive book, containing also a list of Hotels and Boarding Houses, postage eight cents. Free on application, or mailed on receipt of postage by the General Passenger Agent.

#### LONG ISLAND RAILROAD

A. L. LANGDON,      HOWARD M. SMITH,  
Traffic Manager      Genl. Pass. Agt.  
263 Fifth Avenue, New York





### Are You One of the Unfortunates

on last Sunday's run who was obliged to lay up by the roadside on account of Broken Springs, Punctured Tires, Motor, Ignition or Lubrication Troubles, all due to the

#### VIBRATION OF THE HARD ROADS?

Perhaps the people in the rear seats didn't say so, but don't you know down in your heart that they were mighty glad for a chance to rest from the jouncing and bouncing you had been giving them while you tried to fix your troubles?

#### WITH KILGORE AIR CUSHION "SHOCK ELIMINATORS"

on your car you would have been saved all trouble, delay, expense and annoyance, you would have landed your passengers home in good time, well pleased with the elegant ride and greatly refreshed, instead of pounded nearly to death and vowing never to take another automobile ride. It won't cost you but a little time to investigate the great merits of the Kilgores, and you will be surprised and delighted at what they can do for you.

For real downright value for every cent you spend, you get it full and running over in Kilgores only, and that's what you are looking for. It's what you get in real benefits in the way of saving expenses and delays, and in added comfort and safety—that is the correct measure of what you get for the money.

ASK YOUR AUTO DEALER FOR DESCRIPTIVE CIRCULARS AND FULL INFORMATION. He will not deny that Kilgores have no equal, and that should convince you what to buy. If he hasn't the circulars, write us for them, and testimonial letters.

KILGORE AUTO AIR-CUSHION CO., 58 Columbus Ave., Boston

60 H.P.  
6-Cylinder  
Touring Car

# NAPIER

# \$8000

With Top

FIRST SUCCESSFUL MANUFACTURERS OF 6-CYLINDERS

FOUR YEARS' EXPERIENCE

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## RUNABOUTS



\$2250.00

NIKE TYPE. 4-CYLINDER, 18-20 H.P.

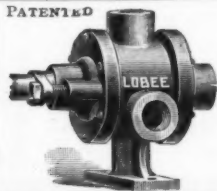
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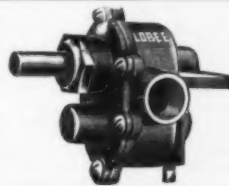


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Have a train of satisfied users everywhere. If you want good circulation on your Automobile, Launch or Motor Boat, use a LOBEE PUMP.

WRITE FOR CIRCULAR AND PRICES.

Lobee Pump and Machinery Co. 160 Terrace Buffalo, N. Y.



## THEY SUPPLY YOUR WANTS

### AMMETERS

American Coil Co., Foxboro, Mass.  
American Electrical Novelty Mfg. Co., Spring, Hudson and Vandam Sts., New York City. (Ever Ready.)  
Atwater Kent Mfg. Works, 42-46 N. 6th St., Philadelphia, Pa.  
Dow Portable Elec. Co., Braintree, Mass.  
Eldridge Electric Mfg. Co., 3 Post Office Sq., Springfield, Mass.  
Snutsel Auto-supply Co., 1534 B'way, N. Y.

### ANTI-SKID DEVICES

Brown, J. C., Mfg. Co., Butler, Ind.  
Crone, F. G., 152 Northampton Ave., Buffalo, N. Y.  
Dentzeau, Geo., 161 Grand St., N. Y. City, N. Y.  
Excelsior Supply Co., 233-237 Randolph St., Chicago, Ill.  
Mesinger, H. & F., Mfg. Co., 1801 First Ave., N. Y. City, N. Y.  
Snutsel Auto-Supply Co., 1534 B'way, N. Y.  
Sunbury Mfg. Co., Sunbury, Ohio.  
Weed Chain Tire Grip Co., 28 Moore St., N. Y. City, N. Y.

### AUTOMOBILE COVERS

Armbruster, R. H., 309 S. 6th St., Springfield, Ill.  
Automobile Cover and Top Mfg. Co., 148 W. 56th St., New York City.  
Duane, W. J. & Co., 1771 Broadway, New York City.  
Empire Gear and Top Co., 413 N. 22d St., Phila., Pa.  
Excelsior Supply Co., 233-237 Randolph St., Chicago, Ill.  
Gilbert Mfg. Co., New Haven, Conn.  
National India Rubber Co., Bristol, R. I.  
Snutsel Auto-Supply Co., 1534 B'way, N. Y.  
Springfield Auto Top and Upholstering Co., 102-106 Dwight Street, Springfield, Mass.  
Vehicle Apron and Hood Co., 198 E. Rich St., Columbus, Ohio.  
Wiley (The), Wm. H. Co., Box 78, Hartford, Conn.

### BASKETS

Burlington Basket Mfg. Co., Burlington, Iowa. (Refrigerator.)  
Hall, E. L., 239 E. 27th St., New York City. ("M. & A.")  
Heywood Bros. & Wakefield Co., 174 Portland St., Boston, Mass.  
Snutsel Auto-Supply Co., 1534 B'way, N. Y.

### BELLS (AUTOMOBILE)

Liberty Bell Co., Bristol, Conn. "Liberty" and "Autobell."  
Mossberg, Frank Co., Attleboro, Mass.  
Post & Lester Co. (The), 30 Sargeant St., Hartford, Conn.  
Rousseau Mfg. Co., 310 Mott Ave., N. Y. City. (Electric.)

### BRAZING COMPOUNDS

A. & J. Mfg. Co., 26 W. Randolph St., Chicago, Ill. (For cast iron and steel.)  
American Ferrofix Brazing Co. (The), 813-a Arcade Bldg., Philadelphia, Pa.  
Dixon, Jos. Crucible Co., Jersey City, N. J. (Brazing graphite.)  
Excelsior Supply Co., 233-237 Randolph St., Chicago, Ill.  
National Cement and Rubber Mfg. Co., 3053-59 Monroe St., Toledo, Ohio. "High Pressure" and "Red Cross."  
Standard Brazing Co., 88 Broadway St., Boston, Mass.  
Thompson, Chas. A. Co., 39 Cortlandt St., N. Y. City. (Self-fluxing solder.) "Solderine."  
U. S. Brazing Compound Co., 113-115 S. 2d St., New Bedford, Mass.

### BUFFETS, PORTABLE

Portable Buffet Co., 145 E. 42d St., N. Y. City.

### CAPS (AUTO)

Automobile Equipment Co., 251 Jefferson Ave., Detroit, Mich.  
Kibbe & Tomlinson, Batavia, N. Y.  
Morawetz Co. (The), 343 Broadway, Milwaukee, Wis.  
Pontiac Knitting Co., Pontiac, Mich.  
Post & Lester Co. (The), Hartford Conn.  
Saks & Co., Broadway, 33d and 34th Sts., N. Y. City.  
Scandinavian Fur and Leather Co., 14-16 W. 33d St., New York City.  
Shaw, Ora D., 109 Kingston St., Boston, Mass.  
Springfield Hat and Cap Co., Springfield, Mass.

### CARBIDE

Acetylene Gas Illuminating Co., 105 Walker St., New York City. (Crude and refined.)  
Snutsel Auto-Supply Co., 1534 B'way, N. Y.

### CARBURETERS

American Coil Co., Foxboro, Mass. (Mixing Valve.)  
American Generator Co., N. E. Cor. Park Ave. and 63d St. (Combined tank and carbureters.)  
Ardale Motor Car Co., Yonkers, N. Y.  
Automobile Supply Co. (The), 1339 Michigan Ave., Chicago, Ill.  
Auto. & Power Appliance Co. (The), 357-359 The Arcade, Cleveland, Ohio.  
Barker, C. L., Norwalk, Conn. "Barker."  
Bowen Motor Co., 92 Baynes St., Buffalo, N. Y. "Phoenix."  
Bradford Motor Co., Bradford, Pa. "Longuemare."  
Breeze Motor Mfg. Co., 33 Court St., Newark, N. J.  
Brennan Motor Co., 101 Grape St., Syracuse, N. Y. "Brennan"

(Continued from page 62)

unused) is attended to by gardeners. Amidst these beautiful pleasure grounds is to be found a playground for children (2,400 square feet large) provided with all kinds of implements for gymnastic purposes and games.

When in 1884 the company celebrated its 10th anniversary it presented to each one of the employees who had served faithfully since the foundation, a life insurance policy amounting to \$375, payable after the 65th year or in case of death. The company pays the yearly premiums as long as the employees remain with them. Those employees, however, that through some reason or other were not taken by the insurance company received a savings bank book of \$15, to which the company annually adds \$15 as their contribution. At the present time 233 persons are in possession of such policies or savings bank books.

Moreover, there are 36 persons employed by the company for more than the last 25 years, and each foreman when celebrating his 25th anniversary with the company receives \$100 each; male workmen \$75 and female \$75 in cash, the latter also regularly a yearly increase in salary of \$25.

For cases of sickness or other emergencies a benevolent society has been formed, and to what extent this society comes into consideration is clearly seen by the fact that about \$3,000 are being paid out yearly.

There's a little fellow driving automobiles in New York and driving regularly who looks as though just escaped from some school for infants. He looks so when seen in a car, for his seat is right at the edge of the cushion and he has trouble reaching the pedals. When seen smoking a pipe people wonder. This youngster of thirty, for he is thirty but looks eight, is Nat Griffith. He is four feet tall and is a driver of three years' experience. Chas. Tate, of the Berkshire Company, employs Griffith to operate a Berkshire in the renting department, and while those who rent cars look askance at first they soon change their unexpressed opinions and travel right along behind their diminutive operator with all confidence. It is a fact that his head cannot be seen from the tonneau, and to the occupants of the rear portion of the car it seems to travel without an operator.

Contracts have been let for the erection of a building 700 feet long by 55 feet wide for the Winton Motor Carriage Company at Cleveland. Increase of business demands this extension of the existing facilities.

Burt Mfg. Co., 124-130 N. Edwards St., Kalama-zoo, Mich.  
Byrne, Kingston & Co., Kokomo, Ind. "Kingston."  
Camden Anchor-Rockland Machine Co., Rockland, Me. "Knox."  
Clemick-Hirsch Co., 594 National Ave., Milwaukee, Wis.  
Columbus Screw & Mach. Co. (The), 244 Kaiser St., Columbus, Ohio.  
Cook Kerosene Carbureter Co., 15-21 Exchange Place, Jersey City, N. J. "Cook Kerosene."  
Crouch Motor Co., Stoneham, Mass. "Crouch."  
Culver Novelty Co. (The), Culver, Ind.  
Curtiss, Geo. H., Mfg. Co., Hammondsport, N. Y.  
Dearborn, F. W., 751 Old South Bldg., Boston, Mass.  
Dow Portable Electric Co., Braintree, Mass. "Methot."  
Dry Gas, The Heath Co., 1623 Broadway, New York City.  
Duryea Power Co., N. River and Hockley Sts., Reading, Pa. (Atomizer.)  
Essex, G. B. Brass Co., 480 Franklin St., Detroit, Mich.  
Fairmount Engineering Co., 3307 Spring Garden St., Philadelphia, Pa.  
Funks, A. H., 83 Chambers St., N. Y. City, N. Y. (Motor Cycle.)  
Generator Valve Co., 108 Liberty St., N. Y. City, N. Y. (Marine.)  
Hatcher Auto-Parts Co. (The), 138 Viaduct, Cleveland, Ohio.  
Hewitt Motor Co., 6-10 E. 31st St., N. Y. City, N. Y.  
Holley Bros. Co., 661-673 Beaubien St., Detroit, Mich. "Holley."  
Hurd & Haggin, 316 Hudson St., N. Y. City, N. Y.  
Jager, Chas. J., Co., 166-68 High St., Boston, Mass.  
Little & Eastman Co., 595 Harrison Ave., Boston, Mass. "Menn's."  
Massnick Mfg. Co., 671 Atwater St., Detroit, Mich.  
Maxwell & Fitch Co. (The), Rome, N. Y.  
Mayo Damper Co., 395 Walnut St., Pottstown, Pa.  
Menn's New Auto Mart, Boston, Mass.  
Merkel Motor Co., Layton Park, Milwaukee, Wis.  
Michigan Motor Co., 246 S. Front St., Grand Rapids, Mich.  
Murray, John A., 112 Front St., Brooklyn, N. Y.  
North Chicago Machine Co., North Chicago, Ill.  
Sherwood Mfg. Co., 1702-12 Elmwood Ave., Buffalo, N. Y.  
Shipman Mfg. Co., Sunbury, Pa. "Shipman."  
Speed Changing Pulley Co., 750 E. Washington St. Indianapolis, Ind.  
Walker, B. F., 57 Golden Hill St., Bridgeport, Conn.  
Wheeler, F. H., 337 N. Meridian St., Indianapolis, Ind. "Schebler."  
Winkley Co. (The), Box 243, Detroit, Mich. "Garlus."  
Wray Pump and Register Co., 191 Mill St., Rochester, N. Y.

### CEMENTS

Diamond Rubber Co., Akron, Ohio. "Titan."  
Excelsior Supply Co., 233 E. Randolph St., Chicago, Ill.  
Fisk Rubber Co., Chicopee Falls, Mass. (Auto and bi.)  
Goodrich, B. F., & Co., "Goodrich," Akron, Ohio.  
Hartford Rubber Works Co., Hartford, Conn. "Hartford."  
Hastings & Anderson, 116 Lake St., Chicago, Ill.  
India Rubber Co., 16 Warren St., N. Y. City.  
International Automobile and Vehicle Tire Co., Milltown, N. J.  
M. & M. Mfg. Co., Akron, Ohio. (And acid curing solutions.)  
National Cement and Rubber Mfg. Co., 3053-59 Monroe St., Toledo, Ohio. "Red Cross," "Anchor," "Pioneer," "High Pressure," "A. & B."  
Noonan Tool and Machine Works, 103-105 Dominick St., Rome, N. Y.  
Pneu-Cure Co., 1133 Broadway, N. Y. City. "Pneu-Cure."  
The Rath Mfg. Co., 1023-5 N. 3d St., Philadelphia, Pa.  
Rubber Goods Repair Co., 89 16th St., Chicago, Ill.  
Tingley & Co., Chas. O., Rahway, N. J.  
Young, Orlando W., 174-180 Frelinghuysen Ave., Newark, N. J.

### CHAINS (AUTOMOBILE)

Baldwin Chain and Mfg. Co., Dept. B, 31 Hermon St., Worcester, Mass. ("Baldwin" Detachable.)  
Boston Gear Works, 152 Purchase St., Boston, Mass.  
Diamond Chain and Mfg. Co., 241 W. Georgia St., Indianapolis, Ind.  
Duryea Power Co., North River and Hockley Sts., Reading, Pa.  
Link Belt Engineering Co., Hunting Park Ave. and P. & R. R. R., Nicetown, Philadelphia, Pa.  
Meisel Press and Mfg. Co., 944-948 Dorchester Ave., Boston, Mass.  
Morse Chain Co., Trumansburg, N. Y. (Silent Running High Speed.)  
Snutsel Auto-Supply Co., 1534 B'way, N. Y.  
Whitney Mfg. Co. (The), Hartford, Conn.

### CHAIN ADJUSTERS

Aurora Automatic Machinery Co., Aurora, Ill. "Thor."  
Clark, A. N., & Son, Plainville, Conn.  
Corbin Screw Corporation, New Britain, Conn.  
Worcester Pressed Steel Co., Worcester, Mass.

### CHAIN CLEANING MATERIALS

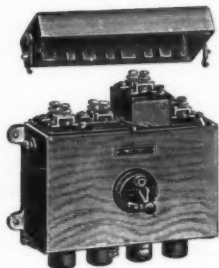
Cole, G. W., Co., 143 Broadway, N. Y. City. ("1-in-1.")  
Excelsior Supply Co., 233 E. Randolph St., Chicago, Ill. ("Famous.")

# **PITTSFIELD**

## **SPARK**

## **Coil Co.**

MANUFACTURERS OF



**Coils, Timing  
Devices  
Switches**

**Jewell Mica  
Plugs  
Terminals, etc.**



Our Coil is the most rapid, economical in battery consumption, most durable and reliable made in the world. Used exclusively by several of the largest and best automobile manufacturers in the country.

The Franklin Car, which recently won the Economy Test, was equipped with our entire Ignition Outfit—Coils, Timing Devices, Switches and Plugs

All we ask is an unprejudiced test to prove to you that our goods are what we claim.

Automobile owners who have ignition troubles would do well to test this Coil

Write for prices and description  
of our 1907 Ignition Products

**Pittsfield Spark Coil Co.**

PITTSFIELD, MASS.



## **POPE- HARTFORD MODEL G.**

There's the maximum of enjoyment and the minimum of care and expense in a 2-cylinder gasoline car whose cardinal points of value have been proved by a season's use and whose details of design, construction and equipment have been improved in accordance with the suggestions that come only with experience.

If you want a car for yourself or for family use, dependable, and easy running, a good hill climber and efficient in the broad sense of the term, a machine you can drive and care for yourself, you cannot afford to overlook the Pope-Hartford Model G. which gives unusual value for the price.

**Body:** Divided front seat and double side entrance tonneau. **Seating capacity:** Five. **Motor:** 2-cylinder, horizontal opposed, located under the hood. **Horse Power:** 18. **Ignition:** Jump spark. **Transmission:** Sliding gear, three speeds forward and reverse. **Drive:** Shaft with bevel gears.

**Brakes:** Double-acting brakes expanding in drums attached to each rear wheel hubs. Double-acting band brake attached to rear of transmission shaft.

(With top \$100 extra.)

**PRICE \$1600**

Write for Catalogue

**Pope Manufacturing Co.**

**HARTFORD, CONN.**

N. Y. City: - - - 1733 Broadway  
Boston: - - - 223 Columbus Ave.  
Washington, D. C.: 819-14th St., N. W.



## THEY SUPPLY YOUR WANTS

### CHAIN GUARDS (AUTOMOBILE)

Automobile Equipment Co., 251 Jefferson Ave., Detroit, Mich.

### CIGAR LIGHTER

International Auto. and Yacht Agency, 119-121 Nassau St., N. Y. City. "Radium."  
Rochester Auto. Co., Rochester, N. Y.  
Snutsel Auto-Supply Co., 1534 B'way, N. Y.

### CLEANING COMPOUNDS

Fisk Mfg. Co., Springfield, Mass. (Soap.)  
Ford & Dennen, 16 Thayer St., Boston, Mass. (Soap.)

### CLOCK HOLDERS

Coleman, H. P., 66 Stanhope St., Boston, Mass.  
Post & Lester Co. (The), 20 Sargeant St., Hartford, Conn. (Watch Holders.)

### CLOCKS (AUTOMOBILE)

Brown, R. E., Whitney Building, Cleveland, Ohio.  
Bullard, J. H., Springfield, Mass. (Speedometer, odometer and clock combined.)  
Chelsea Clock Co., 16 State St., Boston, Mass. (Also Boat.)  
Excelsior Supply Co., 233-237 Randolph St., Chicago, Ill.  
Levy, Manasseh & Co., 182 Broadway, N. Y. City.  
Meyrowitz, E. B., 104 E. 23d St., N. Y. City.  
Motor Car Equipment Co. (The), 55 Warren St., N. Y. City.  
Motor Car Specialty Co., 143 E. State St., Trenton, N. J. (Speed Meter, Odometer and Clock Combined.)  
Post & Lester Co. (The), 20 Sargeant St., Hartford, Conn.  
The Electric Flash Light Clock.  
Wilson, The Auto Clock Co., 935 Arch St., Philadelphia, Pa.

### CLOTHING (AUTO)

Automobile Equipment Co., 251 Jefferson Ave., Detroit, Mich. (Rubber Capes.)  
Clark Glove Co., Peabody, Mass. (Leggings.)  
Excelsior Supply Co., 233-237 Randolph St., Chicago, Ill.  
Gilbert Mfg. Co., New Haven, Conn. (Leggings—Sleeve Protectors.)  
Laitin, I. and H., 289 Church St., N. Y. City. (Fur Lined Overcoats.)  
Mesinger, H. & F., Mfg. Co., 1801-3 1st Ave., New York City. (Leggings.)  
Moore-Smith Co., 250 Devonshire St., Boston, Mass. (Fur and Fur Lined Coats.)  
Nathan Novelty Mfg. Co., 88-90 Reade St., N. Y. City. (Sleeve Protectors.)  
National India Rubber Co., Bristol, R. I. (Rubber Shirt.)  
Post and Lester Co. (The), Hartford, Conn. (Leggings.)  
Raymond, A. & Co., 129-133 Fulton St., N. Y. City. ("Raymond.")  
Rosenthal & Katz, 52 W. 18th St., New York City.  
Scandinavian Fur and Leather Co., 14-16 W. 33d St., N. Y. City.  
Snutsel Auto-Supply Co., 1534 B'way, N. Y. City.  
Stern Bros., West 23d St., N. Y. City.

### COLLAPSIBLE BUCKET

Duplex Folding Pail Co., 114 E. 14th St., N. Y. City.  
Durkee, C. D., & Co., 2 South St., N. Y. City.  
Goodrich, B. F., Co., Akron, Ohio.

### CYLINDER OIL

Allerton Oil and Grease Co., 78 Broad St., N. Y. City, N. Y.  
Columbia Lubricants Co., 78 Broad St., N. Y. City, N. Y.  
Excelsior Supply Co., 233-237 Randolph St., Chicago, Ill.  
Fiske Bros. Refining Co., 59 Water St., N. Y. City.  
Harris, A. W., Oil Co., 326 S. Water St., Providence, R. I.  
Havemeyer Oil Co. (The), 80 Broad St., N. Y. City, N. Y. "Havoline."  
Hawes, Geo. A., 73 Pine St., New York City.  
Kellogg, E. H. & Co., 243 South St., N. Y. City, N. Y. (Anti-Corrosive.)  
Millers', Wm. P., Sons, 100 Greenpoint Ave., Brooklyn, N. Y.  
Musliner, Joseph I., & Co., 204-206 Maiden Lane, N. Y. City, N. Y.  
Spear's, The Alden Sons Co., 369 Atlantic Ave., Boston, Mass.  
Valvoline Oil Co., 27 State St., Boston, Mass. "Valvoline."  
Young, O. W., 180 Freylinghuysen Ave., Newark, N. J.

### EMERGENCY CASES

Mamedion Chemical Co., 314 E. 79th St., N. Y. City.  
U. S. Emergency Case Co., 11 Weaver Bldg., Utica, N. Y.

### ENGINE STARTERS

Auto Improvement Co., The, 304 Hudson St., New York City. "Ever Ready."  
Lock Switch Mfg. Co., 20 Broad St., N. Y. City.

### FIRE EXTINGUISHERS

Badger, E. B., & Sons Co., 63 Pitts St., Boston, Mass.  
Johns-Manville Co., H. W., 100 William St., N. Y. City.  
Little Giant Mfg. Co., The, 88 Wall St., N. Y. City. ("Little Giant.")  
Rex Fire Extinguisher Co., The, 152 Centre St., N. Y. City. ("Rex.")  
U. S. Fire Extinguisher Mfg. Co., 134 W. 23d St., N. Y. City.

## Etiquette of the Road

Infuriated Motorist (to wagoner, who has made him stop)—What the dickens did you make us stop for? Your old horse is not frightened.

Wagoner—Na, she's no feared. But I didna want my new hat spoilt wi' dust frae your auld rumbler!—Punch.

## Putting on Style

"Bought a piano last year," said the man.

"That's good."

"And yesterday I bought an automobile."

"Better still."

"Yes; but I sold the house to buy it, and now I haven't a shed to put it under!"—Atlanta Constitution.

## The Other Fluid

Dr. R. A. Torrey, the evangelist, was condemning drunkenness.

"For my part," he said, "I wish all the whisky dealers were like a certain Western one, a hard headed old Scot, who grew rich in the trade."

"After he had grown rich, the old man built himself a fine house—a limestone mansion on the hill, with a park around it, with conservatories, stables and outbuildings—in a word, a palace."

"One day the old Scot rode in the omnibus past his fine house. A temperance man pointed up at the grand edifice, and said with a sneer:

"'It was the whisky built that, wasn't it?'"

"'Na, na, man; the water,' the Scot answered."—Philadelphia Bulletin.

## Nothing in the Way

The judge's style was possibly a little weighty, but he was a wit—oh, yes, he was a wit pre-eminent even among judges.

A young barrister was putting certain arguments to his lordship, but his lordship did not appreciate either the arguments or the young man's style of expounding them.

He put one fat forefinger to his ear. "You see, Mr. Briefer?" he said.

"I do m'lud," said Mr. Briefer.

It would, indeed, have been a very short-sighted man who could not have seen his lordship's ear.

"Well, your arguments go in there, and"—the other fat forefinger went to the other ear—"out there." And he smiled benignly, as one who knows he has said a good thing.

"Exactly, m'lud!" said Briefer, cheerily. "What is there to prevent them?"—Answers.

An automobile weighing over two tons arrived in New York lately from the Reading Metal Body Company, Fleetwood, Pa., where its parts were assembled. It is the property of E. N.

## GOGGLES AND MASKS

Excelsior Supply Co., 233-237 Randolph St., Chicago, Ill.  
Funke, A. H., 83 Chambers St., N. Y. City.  
Globe Optical Co., 403 Washington St., Boston, Mass.  
Meyrowitz, E. B., 104 E. 23d St., N. Y. City.  
Mills Mfg. Co., The, 10 E. 23d St., N. Y. City.  
Rubay, Leon, 140 W. 38th St., N. Y. City.  
Scandinavian Fur & Leather Co., 14-16 W. 33d St., N. Y. City.  
Snutsel Auto-Supply Co., 1534 B'way, N. Y. City.

## GRAPHITE

Jos. Dixon Crucible Co., Jersey City, N. J. "Dixon" "L. A. W.," "No. 635," "Auto and Bi," "Graphite-oil."

## GREASES

Allerton Oil & Grease Co., 78 Broad St., N. Y. City.  
Columbia Lubricants Co. of N. Y., 78 Broad St., N. Y. City. "Monogram and Initial."  
Fiske Bros. Refining Co., 59 Water St., N. Y. City. "Lubroleine."  
Harris, A. W. Oil Co., 326 S. Water St., Providence, R. I. Auto.  
Kellogg, E. H. & Co., 243-244 South St., N. Y. City. "Anti-friction," "Excelsior."  
Rubay, Leon, 140 W. 38th St., N. Y. City.  
Spear's, The Alden Sons Co., 369 Atlantic Ave., Boston, Mass.  
Vacuum Oil Co., 29 Broadway, N. Y. City.

## HORNS (AUTOMOBILE)

Automobile Supply Mfg. Co., 320 Driggs Ave., Brooklyn, N. Y.  
Exhaust Horn, New Jersey Tube Co., Newark, N. J.  
Funke, A. H., 83 Chambers St., New York City.  
Gabriel Horn Mfg. Co., 970-72 Hamilton St., Cleveland, Ohio.  
Gleason-Peters Air Pump Co., 20 W. Houston St., New York City.  
Goodrich, B. F., Akron, Ohio.  
Hutchinson Electric Horn Co., Suite 9033, No. 1 Madison Ave., N. Y. City.  
Motor Car Equipment Co., The, 55 Warren St., New York City.  
New York Coach and Auto Lamp Co., 798 10th Ave., New York City.  
Riley & Klotz, 17-19 Mulberry St., Newark, N. J.  
Rubay, Leon, 140 W. 38th St., N. Y. City.  
Snutsel Auto Supply Co., 1534 B'way, N. Y. City.  
Twentieth Century Mfg. Co., 19 Warren St., N. Y. City. "Twentieth Century."  
Willis, E. J. Co., 10 Park Place, New York City.

## HOUSES (AUTOMOBILE)

C. & A. Patented Building Construction Co., 170 Broadway, N. Y. City.  
Premier Mfg. Works, St. John, Mich.  
Smith, H. W., Room 1512, No 66 Broadway, N. Y. City.  
Springfield Moulding Works, 58 Waltham Ave., Springfield, Mass.

## IGNITION BATTERIES

American Electrical Novelty & Mfg. Co., Spring, Hudson and Vandam Sts., N. Y. City. (Ever Ready.)  
Dayton Electrical Mfg. Co., The, 609-12 Reibold Bldg., Dayton, Ohio. (Apple-Duplex.)  
Dayton Mfg. Co., Dayton, Ohio.  
Dow Portable Electric Co., Braintree, Mass.  
Eastern Carbon Works, West Side Ave. and Central R. R., Jersey City, N. J.  
Edison Storage Battery Co., Glen Ridge, N. J.  
Electric Contract Co., 202-4 Centre St., N. Y. City.  
Empire State Dry Battery Co., 70 Fulton St., N. Y. City.  
Gould Storage Battery Co., 1 West 34th St., N. Y. City. "Gould."  
Hutchinson Electric Horn Co., Suite 9033, No. 1 Madison Ave., New York, N. Y.  
National Battery Co., 368-382 Massachusetts Ave., Buffalo, N. Y. "Sperry."  
National Carbon Co., W. Madison and Highland Ave., Cleveland, Ohio. "Columbia."  
New England Motor Co., 82 Fletcher St., Lowell, Mass.  
Nungesser Electric Battery Co., 27-33 King St., Cleveland, Ohio.  
Pittsfield Spark Coil Co., Pittsfield, Mass.  
Roche, Wm., Dry Battery Co., 52-54 Park Pl., New York City.  
Royal Battery Co., 143 Chambers St., N. Y. City. (National Sales Corporation, 256 Broadway, N. Y. Factory Sales Mgr.) "Gecce."  
Rubay, Leon, 140 W. 38th St., N. Y. City.  
Snutsel Auto-Supply Co., 1534 B'way, N. Y. City.  
United Electrical Mfg. Co., 53 Vesey St., N. Y. City. "Crescent."  
Willard Storage Battery Co., 29 Academy St., Cleveland, Ohio.  
Witherbee Ignitor Co., 541 N. 43d St., N. Y. City.

## IMPORTERS (AUTO GOODS)

Angiulli, Luigi, 180-182 Centre St., New York City. (Angelicus Lamps.)  
Champion, Albert Co., 541 Tremont St., Boston, Mass. (Spark plugs, spark coils, storage batteries, limousine electric lights, ignition wire, magnetos, oilers, ammeters, voltmeters and siren whistles.)  
Coops, C. W. Co., 3 Appleton St., Boston, Mass.  
Dac Automobile Supply House, 1739 Broadway, New York City.  
Excelsior Supply Co., 233-237 Randolph St., Chicago, Ill.  
Heller, Joseph S., 123 W. 52d St., New York City. ("Pipe" cars: "Simms" safety buffer.)  
Herz & Co., 189 Elm St., New York City. (French coils and storage batteries.)

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 Manufacturers' Agency Co., 1679 Broadway, New York City. (Automobile parts.)  
 Miller, Chas. E., 97-101 Reade St., N. Y. City. (Auto parts and supplies.) (Auto jewelry and horns.)  
 Motor Car Equipment Co., 55 Warren St., N. Y. City. (Accessories and supplies.)  
 Napier Motor Co. of America, 743 Boylston St., Boston, Mass. (Napier motor cars, launches, motors and transmissions.)  
 National Automobile Co., 205-9 E. 86th St., New York City. (Mercedes parts.)  
 N. Y. Sporting Goods Co., 17 Warren St., N. Y. City.  
 Post & Lester Co., The, 20 Sargeant St., Hartford, Conn. (Horns, lamps, ammeters, spark plugs, voltmeters, spark coils, and goggles.)  
 Rubay, Leon, 140 W. 38th St., New York City. (Continental and Michelin tires, auto horns, La Coste ignition apparatus.)  
 Smith & Mabley, Inc., Broadway, between 56th and 57th Sts., New York City. (Billy lamps, "Panhard," "Renault" and "Mercedes" Cars, "Hercules" anti-skid tires.)  
 Snutsel Auto-Supply Co., 1534 B'way, N. Y. City.  
 Stallforth, G. & Co., 396-398 Broadway, New York City. (Spark plugs; mica cores.)  
 Sussfield, Lorsch & Co., 37 Maiden Lane, New York City. (Miscellaneous French auto supplies.)

### INSURANCE (AUTO)

Aetna, Hartford, Conn.  
 Tobin, Joshua F., 500 Fifth Ave., New York City.  
 Travelers', Hartford, Conn.

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Auto Bed Co., The, 36 Columbus Ave., Boston, Mass. "Autobed."  
 Buckeye Jack Mfg. Co., The, Louisville, Ohio.  
 Duff Mfg. Co., Westinghouse Bldg., Pittsburg, Pa. "Barrett."  
 Hardy, The R. E. Co., 225 W. Broadway, N. Y. City.  
 Jersey Brake Co., 56 Columbia St., Newark, N. J. "Searis."  
 Pope Mfg. Co., Hartford, Conn. "Kenosha."  
 Roth Jack and Tool Co., 68 William St., Room 508 New York City.  
 Rubay, Leon, 140 W. 38th St., New York City.  
 Wray Pump and Register Co., 191 Mill St., Rochester, N. Y.

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 American Lamp Works, 66 W. 43d St., N. Y. City.  
 Angiulli, Luigi, 180-182 Centre St., New York City.  
 Atwood Mfg. Co., Amesbury, Mass.  
 Badger Brass Mfg. Co., The, Kenosha Wis. "Solar."  
 Boesch Lamp Co., 1569 Grove St., San Francisco, Cal.  
 Dayton Electrical Mfg. Co., The, 600-612 Reibold Bldg., Dayton, Ohio. (Combined lighting and igniting outfits.)  
 Dietz, R. E. Co., New York.  
 Edmunds & Jones Mfg. Co., 313-315 Riopelle St., Detroit, Mich.  
 Elbridge Electrical Mfg. Co., Elbridge, N. Y.  
 General Electric Co., Schenectady, N. Y.  
 Gray & Davis, Amesbury, Mass.  
 Gray, Peter & Sons, 88-90 Union St., Boston, Mass.  
 Ham, C. T. Mfg. Co., Rochester N. Y. "Ham," "Cold Blast."  
 Hine-Watt Mfg. Co., 69 Wabash Ave., Chicago, Ill.  
 Motor Car Equipment Co., The, 55 Warren St., New York City.  
 New York Coach and Auto Lamp Co., 798 10th Ave., New York City.  
 Post & Lester Co., The, 20 Sargeant St., Hartford, Conn.  
 Rose Mfg. Co., 910 Arch St., Philadelphia, Pa. "Neverout."  
 Rubay, Leon, 140 W. 38th St., New York City.  
 Scoville & Peck Co., 15 Wooster St., New Haven, Conn. "Peck."  
 Snutsel Auto-Supply Co., 1534 B'way, N. Y. City.  
 Twentieth Century Mfg. Co., 19 Warren St., New York City. "Twentieth Century."

### LICENSE TAGS

Automobile Equipment Co., 251 Jefferson Ave., Detroit, Mich.  
 Boyle, John & Co., 112-114 Duane St., New York City. (And lamp numbers.)  
 Dentzeau, Geo., 161 Grand St., New York City.  
 Lighthouse, Chas. F. & Co., 1769 Broadway, New York City.  
 McKinnon Dash Co., Amherst St., Buffalo, N. Y.  
 Mesinger, H. & F. Mfg. Co., 1801 First Ave., New York City.  
 Post & Lester Co., The, Hartford, Conn.

### LOCK SWITCHES

Lock Switch Co., 20 Broad St., New York City.

### MONOGRAMS (BRASS)

The Chandler Co., 31 Taylor St., Springfield, Mass.

### NAME PLATES

The Chandler Co., 31 Taylor St., Springfield, Mass.  
 Walter, N. C. & Sons, 194 William St., N. Y. City.

Dickerson, a New York lawyer. The machine is said to have cost \$10,000. The chassis and machinery were made by the Rochet-Schneider Company, of Paris, and the body with all upper fittings was made by the Reading Metal Body Company. The automobile carries ten persons in comfort and luxury.

Pittsburg automobilists have inaugurated an "orphans" day and they are greatly pleased by the success of the second annual orphans' day, which was observed one day last month. Almost 500 orphans from eight institutions in Pittsburg and Allegheny were given a ride through the streets and parks, followed by an outing at Luna Park. Nearly 100 cars were used to transport the children, and they presented a fine appearance, being decorated with flags and pennants.

The subject of electric ignition and its accessories is admirably treated in a finely illustrated catalogue of 64 pages just issued by Mr. Leon Rubay, of New York, sole U. S. agent for J. Lacoste & Co., Paris. It need hardly be stated that electric ignition for automobiles has long been accepted by the trade, and it is generally admitted that accumulators or storage batteries are the surest and least expensive source for automobile ignition. The catalogue furnishes full instructions for charging and maintaining the accumulators, which are often the most neglected accessories of a car, more often than not covered in dust and acid and the terminals eaten away with sulphate. With a little attention the quantity of electrical current strictly necessary for ignition in hydro-carbon engines is comparatively very small, and in many cases the quantity consumed is far more than need be, owing to the lack of perfect accuracy in the adjustment of the parts. The J. Lacoste Co. have mastered the details of this important subject, and a perusal of their valuable catalogue will familiarize any person of ordinary intelligence with this important branch of motor construction.

The other numerous subjects treated of are all of more or less importance to the motor owner or driver, and embrace all of the necessary accessories of an automobile from induction coils to lubricating oils. In the section devoted to lamps alone there are twenty illustrations, and the publication is altogether one of the best of its kind both in the important element of an educational factor and a descriptive price list of first-class accessories of the automobile.

"I love my love in the morning," sang the young man, ardently.

"Huh!" exclaimed her younger brother; "you've never seen her in the morning yet!"—Puck.

## ODOMETERS

Bullard, J. H., Springfield, Mass. (Speedometer, odometer and clock combined.)  
 Jones, Jos. W., 127 W. 32d St., N. Y. City. ("Jones.")  
 Loring, E. J., Somerville, Mass. (Combined speedometers and odometers.)  
 Motor Car Specialty Co., 143 E. State St., Trenton, N. J. (Combination speed meter, odometer and clock.)  
 Rollins Mfg. Co., Park Sq. Motor Mart, Boston, Mass. (Combined speedometers and odometers.)  
 Smith, R. E. Mfg. Co., Springfield, Mass. (Combined speedometer and odometer.)  
 Veeder Mfg. Co., Sargeant and Garden Sts., Hartford, Conn. ("Veeder.")  
 Warner Instrument Co. (Auto-Meter), Beloit, Wis.  
 Wood Speedometer Co., 106 Sudbury St., Boston, Mass.

## OILS

(See also Cylinder Oil.)

Allerton Oil and Grease Co., 78 Broad St., New York City.  
 Borne-Scrymser Co., 135 Front St., New York City.  
 Columbia Lubricants Co., 78 Broad St., N. Y. City.  
 Cook's, Adam, Sons, 313 West St., New York City.  
 Harris, A. W., Oil Co., 326 S. Water St., Providence, R. I.  
 Hawes, Geo. A., 73 Pine St., New York City.  
 Kellogg, E. H. & Co., 243-244 South St., N. Y. City.  
 Rubay, Leon, 140 W. 38th St., New York City.  
 Speare's, The Alden, Sons Co., 369 Atlantic Ave., Boston, Mass.  
 Vacuum Oil Co., 29 Broadway, New York City.  
 White & Bagley Co., Worcester, Mass. "Oilsum."  
 Young, O. W., 180 Freylinghuysen Ave., Newark, N. J.

## POLISHES (METAL)

Armstrong & Co., Kalamazoo, Mich. ("Monarch.")  
 Cole, G. W. Co., 143 Broadway, New York City. ("R. K." and "3 in 1.")  
 Columbia Lubricants Co., of N. Y., 78 Broad St., New York City.  
 Edmonds, J., Wesley & Son, 216 Franklin St., New York City. (Electric.)  
 National Cement and Rubber Mfg. Co., 3053-59 Monroe St., Toledo, Ohio.  
 Newbern, The, S. C. Co., 505 Quarry St., Phila., Pa.  
 New Jersey Paint Works, Jersey City, N. J.  
 Raimes & Co., 50 Ferry St., New York City.

## PUMPS (AUTOMOBILE TIRE)

Bridgeport Brass Co., 253 Broadway, N. Y. City.  
 Cleveland Faucet Co., Cleveland, Ohio.  
 Gleason-Peters Air Pump Co., 20 W. Houston St., New York City.  
 Post & Lester Co., 20 Sargeant St., Hartford Conn.  
 R. & C. Indicator Co., Bridgeport, Conn.  
 Rubay, Leon, 140 W. 38th St., New York City.  
 Skinner & Skinner, 4133 Indiana Ave., Chicago, Ill.  
 Spacke, F. W. Machine Co., Indianapolis, Ind.  
 Tiley Pratt Co., Essex, Conn.  
 Ultra Pump and Power Co., Auburn, N. Y.  
 Wray Pump & Register Co., 191 Mill St., Rochester, N. Y.

## RAIN APRONS

Boyle, John W. & Co., 112-114 Duane St., N. Y. City.  
 Gilbert Mfg. Co., New Haven, Conn.  
 Indianapolis Dash Co., Indianapolis, Ind.  
 Nathan Novelty Mfg. Co., 88-90 Reade St., New York City. (Rain and dust aprons.)  
 Perfection, The Storm Shield Co., S. Main St., Clyde, Ohio.  
 Springfield Auto Top and Upholstering Co., 102-106 Dwight St., Springfield, Mass.

## SCHOOLS

Manhattan Automobile School, 315-21 W. 96th St., New York City.  
 New York School of Automobile Engineers, 146 W. 56th St., New York City.

## SECOND-HAND AUTOMOBILES

Graham Cycle Co., 601-605 Madison St., Chicago, Ill.  
 Broadway Auto. Exchange, Inc., 513-15 7th Ave., New York City.  
 Inter-State Auto. Touring Co., 5 E. 42d St., New York City.  
 Manhattan Storage Co., 42-44 Cortlandt St., New York City.  
 Manufacturers' Motor Car Co., 54-56 W. 43d St., New York City.  
 Times Square Auto Co., 164 W. 46th St., N. Y. City.

## SHOCK ABSORBERS AND AUXILIARY SPRINGS

Baldwin Chain and Mfg. Co., Dept. B, 31 Herman St., Worcester, Mass. "House."  
 Diezemann Shock Absorber Co., 1311 Hudson St., Hoboken, N. J.  
 Gabriel Horn Mfg. Co., 970-972 Hamilton St., Cleveland, Ohio. "Foster."  
 Godshalk, E. H. & Co., 23d and Hamilton Sts., Philadelphia, Pa.  
 Graham Co., The, 84 Waumbeck St., Boston, Mass.  
 Hartford Suspension Co., 67 Vestry St., N. Y. City.  
 Indianapolis Bolster Spring Co., Indianapolis, Ind. "Victor."  
 Kelsey Suspension Co., Tarrytown, N. Y.  
 Kilgore Auto. Air Cushion Co., 46 Columbus Ave., Boston, Mass. "Kilgore."  
 Sheddan Mfg. Co., The, 138 W. Fayette St., Baltimore, Md.  
 Supplementary Spiral Spring Co., The, 4524-4526 Delmar Ave., St. Louis, Mo.



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Without Help or Exertion. With

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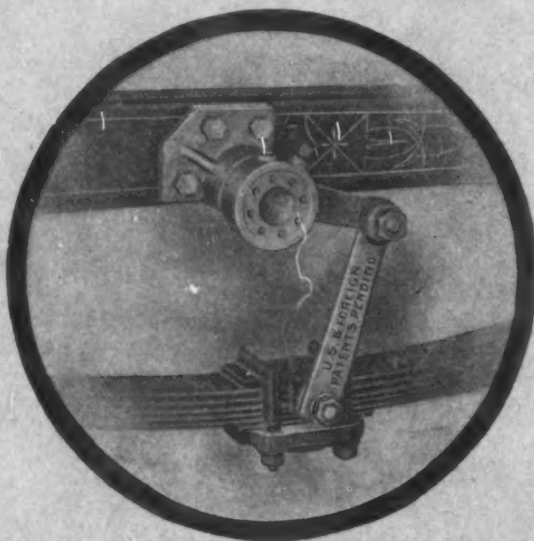
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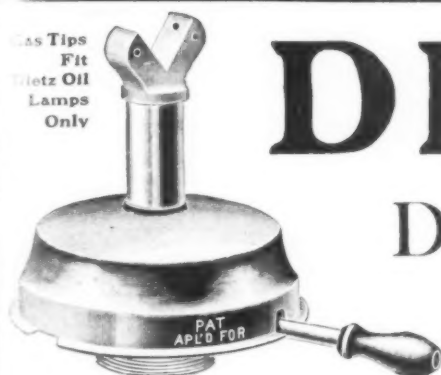
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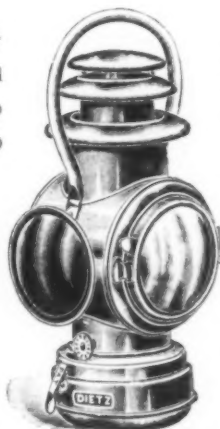


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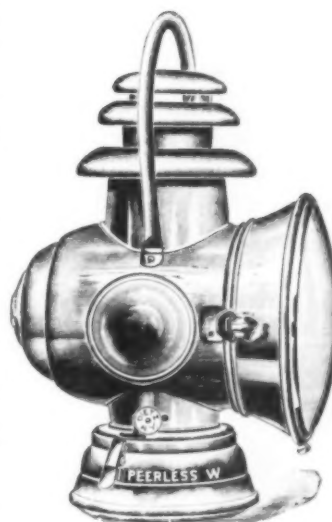
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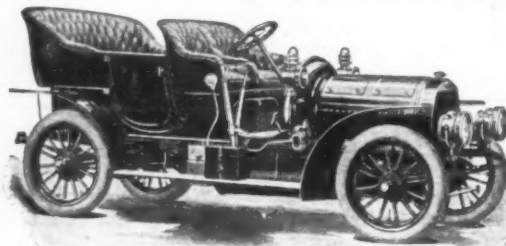
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JULY, 1906

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